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No. 8.

## THE PREVENTION OF DISEASE.<sup>1</sup>

By F. S. Hone, B.A., M.B., B.S.,  
*Semaphore, South Australia.*

The medical man may look upon the practice of his profession from three different standpoints. The first of these may be called "curative." By this, one means that the aim of the medical practitioner in every case he sees is to cure the complaint from which the patient is suffering. Considered from the point of view of the individual, this is for many reasons a most valuable ideal to have fixed in one's mind, right at the outset of entering on one's profession. In our scientific interest in the question of diagnosis, we are apt sometimes to forget that the patient comes not merely to see a doctor, or to be told what is the matter, but to be cured of what is troubling him. It will be noticed that I use the word "cured" rather than "relieved," and there is a purpose in this. A patient who comes complaining of neuralgia, for instance, can quite easily have the pain relieved, but the cure of what is causing that pain may take us a good deal further.

The term "disease" is so indefinite a one that many conditions which we style diseases are really but symptoms. When we speak, for instance, of seeing a case of "gout," we are merely referring to a set of symptoms that betokens a deep-seated alteration in metabolism. It will thus be seen that often, when we speak of a patient being discharged cured of his gout, we really mean that he is only relieved of his present symptoms. The medical man who has the curative ideal firmly embedded at the back of his mind, will go much further than this. It can readily be seen that, alike from the point of view of the patient and the practitioner, the setting of this ideal steadily in front of one is the most likely road to success. Indirectly, it conveys another advantage to the practitioner. If he can only make himself realize that his function is curative, he will never rest satisfied with thinking of conditions as incurable.

And when beginning one's career, it is a very good rule to regard every case as curable, and if one does not succeed in curing it, to regard this as one's own fault, either through imperfect knowledge or technique, rather than the fault of the patient or of the disease. This attitude has its dangers, to which I shall refer presently, but, provided these dangers are recognized, they are more than compensated for by the advantages gained. It is quite a common sight to see a patient cured by one medical man who had this point in view, when others have previously failed, simply because certain symptoms or signs had made them think they were dealing with conditions ordinarily regarded as incurable, and consequently they had not pursued their investigations far enough.

I remember, several years ago, meeting for the first time a medical man in a social way in company

with others. After an hour or two of conversation on a variety of non-medical topics, a chance remark made me suspect that he was a surgeon whom I knew by repute to be a leading man in the profession, and especially regarded with admiration by his old students, several of whom had told me how much they owed to him. Nothing in his appearance or previous conversation would have led the casual observer to suspect his identity, and I confessed to somewhat of a shock when I discovered that my surmise was correct. I had never seen any of his work personally, but next day I questioned one of his old students (who has now even a bigger reputation than his former teacher) as to the ground for the respect in which I knew he was held as a surgeon by his old students. His reply was: "Because in every operation he undertakes, he acts throughout as if the patient would recover. He is not content merely to do a certain operation, but so to do it as to leave everything to cause the least possible inconvenience to the patient after his recovery. There is no unnecessary work; there is no delay. On the other hand, you feel that, throughout the operation, the idea is that, when the patient recovers, he must be left in the best possible condition as to function and after life. And it is because he kept that ideal constantly before us that we students owed so much to him." You will see that this carries out the same idea that I have been insisting upon as the individual ideal which each of us should put before himself, whether physician or surgeon.

I have spoken of a possible danger from this attitude. This lies in the fact that, if one carried this attitude to an extreme, one would be in danger of holding out a promise of cure to patients who are suffering from a disease which the consensus of medical opinion agrees is incurable in the present state of our knowledge. To do this consciously is to come perilously close to "quackery." I need not say that this extreme always ought to be avoided. The common sense of any reputable medical man ought to enable him to recognize this possible danger, and to avoid it. On the other hand, there is no need for him to go to the other extreme, and, in his anxiety to avoid the appearance of deceit, to tell the individual bluntly that he is suffering from a complaint for which nothing can be done. Some years ago, I saw a case that illustrates this. A patient came to see me, apparently suffering from well-marked progressive muscular atrophy in both arms. She had just been four months in a well-known "quack" sanatorium, submitting to various forms of torture, although during the time the trouble had extended from her elbows up to her shoulders. On my remonstrating with her, she replied: "Well, doctor, I went to Dr. So-and-So, whom you all say is one of the best men in the profession, and he told me that there was nothing to be done, that the disease would spread up my arms and over my body, and no medical man could do anything to arrest it; so I thought, as medical

<sup>1</sup> Presidential Address delivered to the Adelaide Medical Students' Society.



men confessed they could do nothing, I might as well try what others outside the profession could do; and, as this man promised to cure me, I thought he might as well try." I was able to point out to her that she had spent a good deal of money to no purpose, and that the absolutely gloomy prognosis might be wrong, so that she was content to relinquish her sanatorial treatment. The folly of so blunt a statement as the first practitioner made is shown by the fact that I recently saw this same individual, and the disease has not progressed beyond the stage it had arrived at five years ago.

While in such a case you may not be justified in stating that you can cure, it is far better for you to make an attempt to arrest the progress of the disease and gradually to accustom the patient to the idea of incurableness than bluntly, at your first examination, to condemn her to steady downward progress. Speak as gravely as you like to relatives or those responsible, but do not put the worst possible side to the patient at your first interview. Get as many opinions as you like, or as the patient or his friends like. Make use of every possible method of investigation rather than lightly pronounce the patient's doom. Try to realize for yourself what it is to be shut out from all hope. If you convince your patients you are shutting them up in a prison from which there is no escape, just because hope springs eternal in the human breast, they will not believe you, but will go to others, who give them hope, possibly because they know less than you do. While you have no right to raise false hopes, be careful not to destroy hope lightly. Just because of this, and because even a disease like cancer sometimes takes such unexpected turns, and because all of us make mistakes, it seems to me to be wise always to give the patient the benefit of the doubt, if there is any doubt. Over and over again I have seen patients, who ultimately recovered, temporarily thrown back because another medical man has taken an unduly gloomy view of their case, without bothering to take all the facts into consideration. We do not always realize how large a part hopefulness plays in the recovery of patients. The medical man is the one on whom the patient's hopes rest, and he can only maintain this hopefulness in his patient by himself assiduously cultivating this ideal of cure as his true function as an individual dealing with individual.

(2) What I have just been saying brings me to the second aspect from which the profession may be viewed. This is best summed up in the familiar words, "medical attendant." This emphasizes the aspect of attendance rather than of cure. There are cases when this attitude is justifiable, when, indeed, no other attitude can be properly assumed. In the incurable cases, of which I have just been speaking, one must still attend and give the sufferer guidance, and such relief as we can. In the infirmities of old age, the same holds true. Here, especially, the medical man, as Lord Rosebery once said at Epsom College, "is engaged in a fight in which, although he may gain temporary advantages, he knows at the last he is certain of defeat." Some of us find this sometimes the hardest part of our duty. I remember on two or three occasions being called to visit different old people, and

having to decline to continue attendance, because I discovered another practitioner had seen them previously, "but had not called again." Each time, when I rang him up, he replied: "It did not seem worth while, because I could not do anything for them." But this is to misunderstand the position entirely. In such extreme cases, the knowledge of guidance and supervision that is a result of the medical man's attendance is a help both to patient and relatives, and our own feelings as to the final futility of remedies should not deter us from rendering what aid we can. In its proper place then, this aspect of our profession has its advantages. On the other hand, it is men who have made this their only ideal in the profession who have given rise to the gibes about the difficulty of getting a doctor out of the house once he is called in, and other gibes about the length of doctors' bills. It is men who are content with this aspect, who are satisfied on the one hand to call some complaints "chronic," and to go on attending for month after month, or, on the other hand, thoughtlessly to submit the patient to an exploratory operation or the removal of some part of his anatomy without considering whether this is a necessary part of their remedial measures, or even likely to be a remedial measure at all. It is the contentment with this idea of attendance, irrespective of efficiency, that is one of the fundamental weaknesses at the bottom of lodge arrangements. It must never be forgotten that, while it may be a tribute to one's humanity, it is a very poor compliment to one's professional ability to have it said of oneself, as I have heard said about medical men on one or two occasions subsequent to the death of their patient, "I don't think he quite understood the case, but no one could have been more attentive than he was throughout the whole illness."

(3) The third aspect is the preventive aspect. While this has been a dream of sundry men in by-gone ages, it is only during the past generation that it has become a hope, possible of even partial realization. The student of to-day cannot hope to realize the difference that the last fifty years has made in this respect. During your coming vacation, take the trouble to read Trench's life and works of Lord Lister, and you will get a faint conception of this with regard to surgical infection. Read again Charles Kingsley's "Two Years Ago," to see the same about cholera fifty years ago.

The discovery of the true mode of infection in these and other diseases, which we call infectious, has for the first time given us a scientific ground for preventive measures, and the gradual enlargement of the group of diseases, which we regard as due to some infective virus, year by year extends the realm of preventive medicine. Consider for a moment how great a proportion of the diseased conditions which you see in the wards are due directly or indirectly to some infection. Apart from the cases which you consider acute infections, like enteric or scarlet fever, reflect on how many of the conditions you see are the sequel, for instance, to an attack of influenza or to some infective catarrhal condition of the upper respiratory tract, which has been misnamed influenza by patient or physician. Think how many cases you see in the

ear department which follow on measles or scarlatina, or some other infection of the naso-pharynx. How many of the eye cases are the after-effects of a gonorrhoeal or syphilitic infection? How many heart or vascular cases are due to a previous rheumatic or syphilitic infection? How large a part a previous syphilitic infection plays in so wide a range of the medical and surgical cases which you see. Consider how much greater is the rôle of infection in the production of chronic joint diseases than was imagined a generation ago, when practically only tubercular and septicæmic joints were regarded as infectious, with an occasional case of gonorrhoeal rheumatism; when rheumatic arthritis was regarded as a constitutional disease, and all chronic joint affections were regarded as constitutional, either in the form of gout or chronic rheumatism, or the so-called rheumatic gout. Try and think out for yourself how much more widely the dependence on a previous infection of more or less chronic conditions, whether in joints or other organs, will be recognized in the future as the theory of "focal infection" is more generally recognized. Turn again to occupational diseases: think of plumbism, pneumokoniosis and others not so well known in our thinly populated country, which are due to conditions in individual occupations which are removable. Think of the number of conditions induced or aggravated by alcoholism which are unnecessary. Reflect on the part that faulty environment plays in the chronic infection, tuberculosis, and in other well-known diseases. Think for a moment of the large part of infantile mortality that is preventable; of how great a proportion of deaths in the first month, which are ascribed to malnutrition or deformities, are really caused by syphilitic infection; of the 20% of deaths in the first year of life due to diarrhoeal diseases, which are always infective; of the number who survive these infections in infancy, but are sick and puny from the after-effects. As your thoughts range over the wide expanse of disease that can thus be regarded as in some measure preventable, you will be led to exclaim, as the late King Edward did of tuberculosis, "if preventable, why not prevented." This preventive aspect, although theoretically realized in the profession, has not yet assumed the prominence which is its right, and which is bound to come. For one thing, the possibility of prevention in many of these diseases is comparatively a new idea, and even yet is not accepted by all. For another thing, it will be remarked that, in this ideal, we rather view the matter from the standpoint of the nation, whereas the greater part of our medical training and thinking in medicine and surgery concerns an individual dealing with an individual case. Under our present educational system, practically all our education up to the time we enter on medicine is individualistic. It is to fit us for a profession as an individual. The same individualistic ideas follow us in our medical training, and it is hard to get away from them in our thinking, unless we are made conscious of this bias. For another thing, directly we start to think along these lines, there is a clash of our individual interests with the national interests. If a private medical practitioner is attending a case of enteric fever or diphtheria, it in no way conflicts with his interests for another individual to

contract enteric fever or diphtheria from this case, or from the same individual or condition that caused the case. From the national point of view, however, it is a serious waste, either of life or time. Quite apart from the possible waste of life, it is a distinct loss to the nation. Not only is there the loss of national wealth through the adult patients being incapacitated from work or the juvenile patients being hampered in their education, but there is diversion of medical and nursing energies from other avenues of employment, to speak of only a few points. While from the national point of view it is, therefore, important to see that the first enteric fever or diphtheria patient is not a carrier of disease, it is of very little importance from the individual practitioner's point of view. In fact, it may directly clash with his interests, unless fresh patients happen to be his lodge patients. I have even heard a country practitioner unctuously describe enteric fever patients as "guinea-pigs." Under these circumstances, with the temptation to let things be as they are, it is not wonderful that one of the boasts of the medical profession in the past has been that they, who have most to lose and least to gain by the lessening of the prevalence of disease, have been the chief advocates of the spread of preventive measures, oftentimes in the face of great opposition.

Several considerations suggest that, in the near future, this ideal of the prevention of disease will have to be faced more seriously by the medical profession as a whole. This is the main reason for my taking it as the subject of the presidential address this year, in the hope that, sketchy as the treatment of the subject must necessarily be, the idea at the back of it may be sown in your minds and there germinate, to grow and bear fruit with your increasing experience in your profession year by year.

Although, speaking generally, members of the medical profession still retain their individualistic views of its aims and ideas, the mind of the public at large has of late years been considerably attracted towards the larger national ideal. In travelling to and fro in the various States in the past few years, I have been astonished at the increasing number of men outside the medical profession who talk of the health of the people as a national asset, and who are coming more and more to look upon it as a function of a national government to maintain this asset by some means or other. They are not clear as to how this is to be done, but they feel that, somehow or other, it ought to be done, and that it is time we made a serious attempt at tackling the job. It is a dim consciousness of this that is behind much of the talk that goes on about the nationalization of the profession. No one can tell you quite what he means by this phrase. If pressed for a scheme, he very soon shows that he is seeing only one side of the question. Medical men, on the other hand, are often either so scared of the suggestion of the word "nationalization" that the motive behind it escapes their vision, or are so well aware of the impossibility of extravagant schemes we hear put before us that they become impatient and refuse to discuss anything that seems to pertain to the subject.

But if we are to be leaders of the public in medical matters, as by virtue of our special knowledge and training we should be, we must not let ourselves be frightened by bogies or lose patience because of the extravagances of those who mean well, but allow their ignorance to mislead their enthusiasm. We should behave as we do with the individual whom we are called in to attend. Carefully note the symptoms that betoken disease in the body politic, investigate the case thoroughly, and ourselves suggest the remedies that appear necessary; in other words, be constructive rather than merely destructive, or, worse still, indifferent.

The recent experiences of so many men abroad is a second factor that cannot be without influence. After the war, there will be large numbers of thinking men who have seen diseases which are common in civil life prevented or lessened in frequency amongst large bodies of men existing under much less favourable conditions. While they may recognize that it may be impossible to obtain the same control in civil as in military life, they are bound to ask themselves if means cannot be devised by which some of these things can be prevented. If they notice, for instance, that men who have suffered from enteric fever are not permitted to be discharged from a military hospital until an endeavour has been made to ascertain whether they are possible carriers of infection, they are bound to ask why the same procedure should not be made compulsory in civil life. It may not be necessary or advisable to inoculate all civilians against enteric fever, as we do our soldiers, but if you have watched the wards at all, you will have noted how frequently an epidemic arises in a camp of men employed in some big public work, and the question will surely be asked as to whether this cannot be avoided by inoculation of would-be workmen, just as it now-a-days is done in the case of nurses who undergo training in our public hospitals. These are but instances of the sort of question that is bound to crop up in many directions.

Again, for many years past, the Quarantine Service has endeavoured successfully to prevent the introduction to our country of diseases like plague and small-pox, which are not endemic amongst us. In more recent years the *Immigration Restriction Act* has prevented the entry of would-be immigrants who, on the one hand, are victims of tuberculosis or syphilis, or similar communicable diseases in an infective stage, or, on the other hand, suffer from tabes or rheumatoid or chronic non-communicable diseases to such a degree that they are likely to be a burden on the State. It is obvious that such a position cannot be long maintained without further developments. We shall become conscious that if we recognize it is foolish from a national point of view to admit an individual with active tuberculosis because he may communicate the same disease to others, it is still more foolish to pay a pension to such an individual who is already in our country, without taking steps to ensure that he shall not wander abroad, spreading infection at his pleasure and perpetuating the maintenance of such pensioned individuals by the State. We shall become conscious again that if we exclude the victim of active syphilis from the Commonwealth

as a whole, it is foolish to allow one State to attempt one means of controlling this disease within its borders and another State another means, while in a State like our own no means at all is attempted. We will recognize again that if it is a burden to the State to maintain the subjects of chronic disease imported from abroad, and therefore wise to exclude them, it is just as much a burden to the State to maintain individuals with this same disease who happen to be living amongst us, and therefore it is wiser to search if some means cannot be devised by which we can prevent this burden being so great for future generations.

The great trouble at present, in all these questions, is that we have at the one extreme a small group of public officials deeply interested in the national health, versed in the scientific aspects of the question, aware of the national waste that arises from these causes, yet, for the most part, unacquainted by actual experience with private practice, and therefore ignorant of the every-day questions that confront the general practitioner and reveal to him the weaknesses of the elaborate schemes he sometimes hears them put forth. At the other extreme stands the average general practitioner, who is concerned chiefly with earning his daily bread or getting through his daily work somehow, accustomed to think of himself and his patients as individuals, and, Gallo-like, caring for none of these things, which are dear to the public health official. There is urgent need in the profession for an intermediate body of medical men to arise, acquainted with the difficulties of general practice, with the problems of households and of struggling families, with the clash of every-day affairs, and yet with a sympathetic understanding, also, of the ideals of preventive medicine. It is for this reason that I have ventured to lay the importance of this aspect of your profession before you to-night. With you, and men of your age and standing, rests the future of the profession and of the nation. The methods that were suitable to our fathers alike for the prevention of disease as in medical and surgical treatment of individual cases, are no longer necessarily suitable to us. The old order changes, giving place to new. It is the realization of this fact that has led the representatives of the New South Wales Branch of the British Medical Association on the Federal Committee to secure the passage of a resolution by that Committee, asking each Branch to consider some practical scheme of bringing about such a degree of national service as may seem advisable. Therefore, you cannot start at too early a stage of your medical career to cultivate the habit of viewing the facts which come before you in your work, in the light of this preventive ideal. For you can carry this ideal into whatever branch of your profession you are especially interested in, and, indeed, it is the element of this, added to those two former ideals I spoke of, which vivifies them. Carry this into your surgical work, and you will find that, unconsciously, you are emulating the spirit of that surgeon I mentioned, and in your work not merely relieving a present condition, but relieving it in such a manner that it shall not provide ground for some future disability which the patient calls illness. Carry it into your medical work and you will not be content merely to relieve the acute symptoms of gout, but



will endeavour so to advise that patient and other individuals as to their future life, that, as far as possible, they know the means of delaying or avoiding future developments of condition that will produce symptoms. If you specialize in pathology or bacteriology, you will find yourself unable to be content with the mere accumulation of facts, whether macroscopic or microscopic, but will have constantly at the back of your mind the reason for the appearance of those conditions and the best means of preventing them occurring in healthy individuals. Even the idea of medical attendance is raised to a higher level, for the preventive idea at the back of your mind will cause you, when attending an infant or a growing child, from time to time so to advise parents or those responsible that the rules of health are observed and that the infant or child grows into a healthy adult. At the same time, the cultivating of this preventive spirit will involve that you are never content, but always endeavouring to improve your technique and increase your knowledge, and, as a result of the failures of which you are conscious, attack your problems from a new aspect.

By cultivating this spirit, you will not only be benefiting yourself in these ways, but will benefit your profession in that you will help to destroy that commercialism which is tending to turn it from a profession to a business; you will benefit the public individually in that you will show them that medicine does not consist merely in bottles of medicine and operations; you will benefit the nation, because you will build up a body of public opinion, both within and without the profession, which will recognize alike the strength of skilled and disinterested private practice and of a certain measure of control of those who will not voluntarily obey the teaching of such practitioners. And so, whatever may be your success in life from other points of view, you will show that you remember that "He who would win the name of truly great must make the present with the future merge gently and peacefully, as wave with wave."

#### CITY MILK SUPPLY: A Plea for Pasteurization.

By **E. B. Heffernan, M.B., B.S.,**  
Melbourne.

As a general practitioner, with a large midwifery practice, it has been my custom to keep my babies under observation for the first year of life, having them weighed regularly, and watched to see when any addition to their diet becomes necessary. In this way I have gained considerable experience in infant feeding, and have come to the conclusion that the only safe city milk supply for infants—apart from breast milk—is milk from tuberculin tested cows, pasteurized by modern scientific methods, under expert bacteriological inspection.

I recently read an article by one of our children's specialists, advocating a refrigerated fresh milk—the Talbot milk—for infants. This milk is delivered with ice, and even an ice chest is supplied to mothers in poorer suburbs. It may be an excellent milk supply, but its method of distribution through local agents leaves a good deal to fate. I have had that milk

delivered at my house sour day after day, in August, and was forced to change to pasteurized milk.

Another statement made was that summer diarrhoea was practically unknown in country districts, where fresh milk is probably always obtainable. That may be true for the whole of Victoria; but taking my own town and country experiences there is very little to choose between them. In proportion to the population I treated as many cases of summer diarrhoea in the country as I do in the city, and that was in the centre of a dairying district.

During my first summer in this suburb I saw an enormous number of cases of summer diarrhoea, all the infected children being fed on ordinary dairy milk. Finding no available safe fresh milk supply, I approached the Willesmere Milk Company, and, after much persuasion, they agreed to send out one small cart of infants' milk from their central depot daily. My next difficulty was with the mothers. So many of them had been told that pasteurized milk was dangerous, one children's specialist even stating that it was poison for infants. After giving the milk a trial, however, they were quite converted, and promptly recommended it to others, with the result that pasteurized milk now forms a large proportion of the infant milk supply of this district.

By the use of pasteurized milk I have quite halved my summer work amongst young children, and last summer treated only six cases of summer diarrhoea.

The before-mentioned article ends with the following remark: "If pasteurized milk is used, it is necessary to keep it iced during the summer, otherwise it will deteriorate quickly."

This is not correct. By actual comparison I find that pasteurized milk keeps some hours longer than raw milk straight from the cow, let alone raw milk that has travelled about even under good conditions; we do not get the best in Victoria. Pasteurized milk need not be kept on ice in warm weather. That was one of my reasons for introducing it into the district in which I work, ice being difficult to obtain, and beyond most people's purses. Of course, all milk needs reasonable care, and should be kept on ice if possible; but no milk can be expected to keep for twenty-four hours in the ordinary household, ice or no ice, in the very hottest weather. For this reason I always recommend some form of dried milk for the last feed at night and first feed in the early morning during heat waves. In support of the above statements, I would like to quote H. Newton Parker (City Milk Supply, 1917), who says that pasteurization has been definitely proved to delay bacterial changes in, and also the souring of milk. He also gives figures to prove that in one institution the infant mortality was 20% lower when pasteurized milk was supplied than when fresh milk from a specially selected herd was used. Where two large groups of infants were taken, and the first fed exclusively on raw milk, while the second were supplied with pasteurized milk, the results on comparison were found to be slightly in favour of pasteurized milk.

America is the most progressive country in the world, as regards its city milk supplies, both in the quality of the milk supplied and in its method of dis-

tribution. This enviable position has been attained mainly through the efforts of a great philanthropist—Nathan Straus, the pioneer of pasteurization. In 1893 he established the first milk depôt in New York, which supplied pure pasteurized milk for infants to the poor. The following year six depôts were established, and from that time onwards the demand for pasteurized milk grew steadily, until at the present time the greater proportion of milk supplied in large American cities is pasteurized. Taking three large cities, the percentages of total milk supply pasteurized are:—

New York .. .. .	88%
Boston .. .. .	80%
Pittsburg .. .. .	95%

The great city of New York is said to hold one of the lowest records for infant mortality in the United States, but this result was achieved only after the general establishment of milk depôts, modelled on the Straus milk charities, in other words by the general use of pasteurized milk. If the Government is to give practical help in the distribution of pure milk, why not give that help to the distribution of pasteurized milk. As pasteurization is not the cheapest method of dealing with milk, a subsidy would help materially towards making such milk available for infants in the poorer suburbs, without the added expense of supplying ice chests. I would very much like to see more interest taken in this question by the general practitioners of Melbourne.

### Reports of Cases.

#### A CASE OF MUSCULAR ATROPHY.

By Alex. Lewers, M.R.C.S., L.R.C.P., D.P.H.,  
Honorary Physician, St. Vincent's Hospital, Melbourne.

R.H., *æt.* 12 years, a schoolboy, was admitted to St. Vincent's Hospital, Melbourne, on April 11, 1918. The patient's mother stated that he had been healthy up to the age of seven years. He then suffered from "rheumatism," and was in the Children's Hospital for three months. He got better, and remained well for three years. Eighteen months before admission he had a severe attack of rheumatic fever, with severe pains in the joints of his upper and lower extremities. The attack lasted for several weeks, and after the acute symptoms had subsided the joints remained painful for some months. On getting out of bed he found that he was unable to stand without assistance, and that walking was impossible. The knees became semi-flexed, but could be partially extended without pain. The limbs and trunk muscles became progressively wasted, and the patient, who had previously been bright and intelligent, became dull and apathetic, and lost interest in his surroundings.

**Family History.**—His father and mother were living and healthy. He was one of thirteen children, and was the third child. His mother had had no miscarriages. The child before the patient had been still-born.

On admission to the Hospital, his condition was as follows: The temperature was 39.6° C., the pulse-rate was 128, and the respiratory-rate 24. He looked pale and anæmic, and appeared somewhat deficient in intelligence. He was somewhat slow in understanding questions and in replying to them. He apparently found difficulty in expressing his ideas. There was an extraordinary degree of muscle wasting of the upper and lower limbs. The trunk muscles were somewhat wasted, but did not exhibit any very marked change, particularly the abdominal muscles.

There was no sign of organic disease in the heart or lungs. The urine was amber in colour and acid in reaction. Its specific gravity was 1.015. It contained neither albumin nor sugar.

There was some apparently slight bony enlargement round the knees, wrists and ankles and shoulders, which was exaggerated by the muscular wasting. There was no loss of movement in the limbs, though the legs were very slowly moved, and could not be fully extended. The knee-jerks were equal, but feeble. The plantar reflex was flexor. There was no loss of epicritic or protopathic sensibility. The pupils were equal and normal in reaction. A cell count revealed 3,200,000 red blood corpuscles per cubic millimetre of blood.

An X-ray examination was carried out, and the report was as follows:—

The brilliant photographic detail, with densely outlined joint surfaces, are most suggestive of a chronic infective condition. (?) Rheumatoid arthritis.



FIGURE I.

Condition Soon After Admission. The prematurely aged face is well shown.

The patient's condition gradually improved without interruption, and on June 20, 1918, it was recorded as follows:

The general condition was much improved. The patient was quite bright mentally. Epicritic and protopathic sensibility were unimpaired. The knee-jerks were feeble, but equal. The plantar reflex was flexor. The bicipital jerks were equal and active. The pupils reacted equally and promptly. The patient could stand with support, and was able to walk a few yards with assistance.

His height was about normal for his age. His weight throughout his stay in Hospital was as follows:—

20.4.1918:	3 stones 10 lbs.
29.4.1918:	3 stones 10 lbs.
7.5.1918:	3 stones 8 lbs.



13.5.1918: 3 stones 8½ lbs.  
 26.5.1918: 3 stones 11 lbs.  
 3.6.1918: 3 stones 13½ lbs.  
 12.6.1918. 4 st.  
 1½ lbs.  
 17.6.1918: 4 st.  
 2 lbs.  
 24.6.1918: 4 st.  
 4 lbs.

This case was variously regarded by those who saw the patient. The only positive description that fits his condition was primary muscular atrophy, for no condition could be established to which the remarkable wasting appeared secondary. The notes are a transcript of those by Mr. J. M. O'Keefe, and I am indebted to Dr. J. V. Lewis for the trouble he took in photographing the patient, and to Dr. H. M. Hewlett for the skiagrams and for the assistance in considering the possibility of a rheumatoid affection.

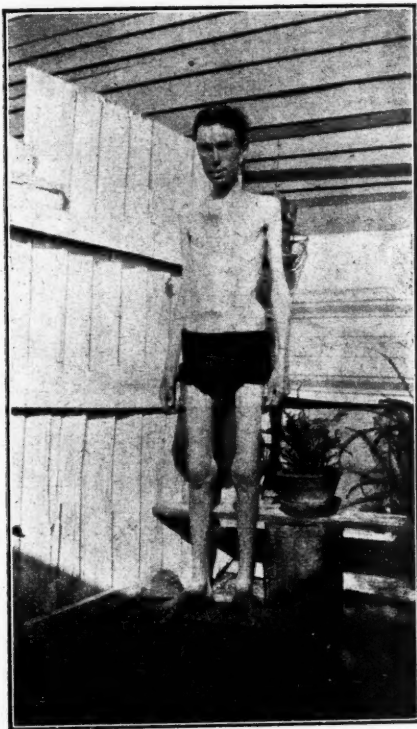


FIGURE III.  
 Dr. H. Osburn Cowen's Patient, *act.* 24, weight 5 stones 13 lbs.

Happening to show the photographs to Dr. H. Osburn Cowen, of Kew, he kindly showed me a similar case under

his care, and supplied the accompanying photograph. This patient presented no signs of organic disease, and could walk about.

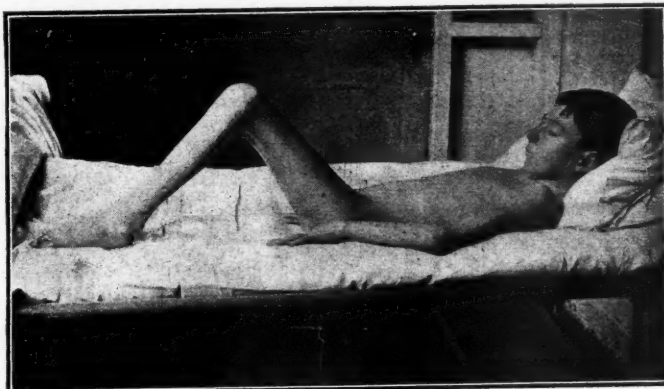


FIGURE II.  
 Condition About Ten Days Before Discharge.

## Reviews.

### RADIOLOGY.

The second part of Robert Knox's work on Radiography and Radio-therapeutics<sup>1</sup> is devoted entirely to the latter subject. It is a book of handy size, and is well arranged and illustrated. As usual, the author deals in a clear manner with apparatus and technique, and he apparently considers the "coll" superior to the "transformer" for the production of X-rays for radiation therapy.

Once again we have impressed upon us the fact that the

chronic cases only receive benefit from radio-therapy, and that acute cases are better left until all acute reaction has subsided. Adamson's technique is recommended in epilation of the scalp for ringworm, and it is simple and rapid. The treatment of exophthalmic goitre has greatly advanced, and, even in the cases not completely cured, a great amelioration of symptoms occurs. Efficient filtration of the X-rays is essential, otherwise severe burns may be produced.

Some interesting work on the treatment of uterine fibromata is described, and the cases respond in a wonderful manner to treatment. The patients who receive greatest benefit are between 40 and 52 years of age, and the type of growth responding most quickly is the interstitial fibroma, with profuse hæmorrhage and abundant clot. The bleeding generally ceases after the first few exposures to highly penetrating radiations and the rapidity with which the tumour diminishes in size is little less than marvellous.

No new matter is included in the description of diseases of the blood, and the necessity for prolonged treatment is insisted upon.

The chapter on the physics of radium, by C. E. S. Phillips, F.R.C.S., is very interesting. Radium is preferable to X-rays when greater penetration is needed. The gamma rays are the most highly penetrating, and radium is extremely rich in them. In the next place, the author finds it more convenient to apply. The ease with which it may be implanted in a tumour forms a third indication for its use. Nervous patients are not so alarmed by its application as they are by the application of X-rays. In the last place, the portability of radium gives it an advantage over X-rays.

The combined use of radium and X-rays is warmly advocated. It is of great use as a prophylactic treatment after amputation of the breast for malignant disease. We heartily agree with Knox in the statement that every case of radical breast operation should be submitted to a course of radiation. Besides preventing any local recurrence, the radiations prevent the formation of dense and stiff scarring, which is often so painful and crippling.

Radiation of keloid scars in all plastic operations, and especially in plastic operations of the face, has proved of great benefit, especially in extensive war injuries, and many of the flaps turned on to the face from the scalp have been effectually depilated by X-rays.

<sup>1</sup> Radiography and Radio-therapeutics, Part II., Radio-therapeutics (The Edinburgh Medical Series), by Robert Knox, M.D., M.R.C.S., L.R.C.P.; 1918. London: A. & C. Black, Limited; Royal Soc., pp. 606, with 15 plates and 100 illustrations in the text. Price, 15s. net.

## Naval and Military.

### CASUALTIES.

We regret to record that in the 423rd list of casualties the name of Major Douglas Dunbar Jamieson, M.C., is included under the heading "died of injuries."

From the same list we learn that Captain Ernest Moore McCaffrey has been wounded.

### APPOINTMENTS.

The following notices dealing with appointments, etc., have appeared in the *Commonwealth of Australia Gazette*, No. 125, of August 15, 1918:—

#### Permanent Naval Forces of the Commonwealth (Sea-going).

Thomas Arthur Kidston, M.B., M.S., to be appointed Temporary Surgeon, with pay at the rate of 25s. per diem and rations, and, in addition, to be paid the sum of £25 as equipment allowance on first appointment. Dated 8th July, 1918.

#### Citizen Naval Forces of the Commonwealth.

##### Royal Australian Naval Brigade.

Frederick Samuel Thomas, M.B., to be appointed Surgeon, and as Sub-District Naval Medical Officer, Maryborough, Queensland. Dated 1st June, 1918.

#### Australian Imperial Force.

##### Army Medical Corps.

##### To be Major—

Honorary Captain G. L. Kerr, Australian Army Medical Corps Reserve. Dated 14th July, 1918.

##### To be Captains—

Frederic Lindsay Macqueen. Dated 1st July, 1918.  
Oliver Latham. Dated 11th July, 1918.  
Honorary Captain G. Brown, Australian Army Medical Corps Reserve. Dated 16th July, 1918.  
Honorary Captain H. South, Australian Army Medical Corps Reserve. Dated 13th May, 1918.  
Henri Victor David Baret. Dated 15th May, 1918.  
Robert Norman Scott Good. Dated 11th July, 1918.  
William Richard Trembath. Dated 29th July, 1918.  
Walter Crosse. Dated 24th July, 1918.

The following appointments have been terminated:—

##### First Military District—

Major J. G. Avery. Dated 22nd July, 1918.  
Captain E. M. Lilley. Dated 3rd July, 1918.

##### Second Military District—

Major C. Shellshear. Dated 20th July, 1918.  
Major C. C. Corlis, M.C. Dated 25th July, 1918.  
Captain (Honorary Major) E. P. McDonnell. Dated 22nd July, 1918.  
Captain M. A. McI. Sinclair. Dated 12th July, 1918.  
Major R. C. Winn, M.C. Dated 18th June, 1918. (This cancels the reference to this officer which appeared in Executive Minute No. 443/1918, promulgated on page 1461 of *Commonwealth of Australia Gazette*, No. 99, dated 4th July, 1918.)  
Lieutenants R. B. Ronald and C. S. B. Ricketts. Dated 3rd August, 1918.

Lieutenant A. E. Rainey. Dated 9th July, 1918.

##### Third Military District—

Captain W. Rock. Dated 26th February, 1918.  
Captain R. L. Bellamy. Dated 23rd July, 1918.

#### Australian Naval and Military Expeditionary Force.

##### Australian Army Medical Corps.

The appointment of Captain R. B. Trindall has been terminated from 6th July, 1918.

#### Australian Military Forces.

##### Grant of Honorary Rank.

The undermentioned, who have served in the Australian Imperial Force as Commissioned Officers, being appointed to the Australian Army Medical Corps Reserve (temporarily), and being granted Honorary Rank equivalent to that held by them in the Australian Imperial Force.

Officers who, on appointment for active service outside Australia, were not serving in the Australian Military Forces.

##### First Military District.

##### To be Honorary Major—

E. F. Molle, late Major, Australian Imperial Force. Dated 1st December, 1917.

J. A. Murphy, late Major, Australian Imperial Force. Dated 20th June, 1917.

##### Second Military District.

##### To be Honorary Majors—

R. C. Winn, M.C., late Major, Australian Imperial Force. Dated 24th August, 1917. (This amends the notification relative to R. C. Winn, which appeared in Executive Minute No. 427/1918, promulgated on page 1462 of *Commonwealth of Australia Gazette*, No. 99, dated 4th July, 1918.)

N. E. B. Kirkwood, M.C., late Major, Australian Imperial Force. Dated 20th June, 1917.

##### To be Honorary Captains—

F. N. Rodda, late Captain, Australian Imperial Force. Dated 6th May, 1916.

E. V. R. Fooks, late Captain, Australian Imperial Force. Dated 22nd May, 1916.

E. S. Smalpage, late Captain, Australian Imperial Force. Dated 14th July, 1916.

E. L. Morgan, late Captain, Australian Imperial Force. Dated 11th September, 1916.

F. C. Adams, late Captain, Australian Imperial Force. Dated 27th October, 1916.

##### Third Military District.

##### To be Honorary Major—

W. B. Craig, D.S.O., late Major, Australian Imperial Force. Dated 27th April, 1917.

##### To be Honorary Captains—

J. I. Rowan, late Captain, Australian Imperial Force. Dated 5th July, 1916.

C. F. MacGillcuddy, late Captain, Australian Imperial Force. Dated 16th October, 1916.

R. A. Cooper, late Captain, Australian Imperial Force. Dated 1st December, 1917.

##### Fourth Military District.

##### To be Honorary Major—

E. W. Griffiths, late Major, Australian Imperial Force. Dated 20th June, 1917.

##### To be Honorary Captain—

G. M. Hay, late Captain, Australian Imperial Force. Dated 26th April, 1916.

##### Fifth Military District.

##### To be Honorary Majors—

J. Bentley, M.C., late Major, Australian Imperial Force. Dated 14th November, 1916.

G. W. Baker, late Major, Australian Imperial Force. Dated 20th August, 1915.

##### Sixth Military District.

##### To be Honorary Major—

H. P. Brownell, D.S.O., late Major, Australian Imperial Force. Dated 27th April, 1917.

#### No. 4 AUSTRALIAN GENERAL HOSPITAL.

It has been announced that the expenditure of a sum not exceeding £750 for equipment of the X-ray Department of the No. 4 Australian General Hospital, Randwick, has been authorized. Authority has also been given for the expenditure of £1,800 for the provision of additional accommodation for the staff of the same Hospital.

We have been informed by the Director of Naval Medical Services that there are a few vacancies for temporary surgeons in the Royal Australian Navy.

Messrs. Dalgety & Company, Limited, Bent Street, Sydney, will be pleased, in connexion with war propaganda work, on receipt of 2d. for postage, to forward to medical practitioners interesting pictorial and other war literature for use in their waiting rooms.

## The Medical Journal of Australia.

SATURDAY, AUGUST 24, 1918.

### What Next?

At the meeting of the Federal Committee of the British Medical Association in Australia, held on August 7, 1918, Mr. G. A. Syme delivered his message concerning the result of the plebiscite taken in July, 1917, on the question asked by the Committee of the members of the Association: "Are you in favour of the Federal Committee requesting the Federal Government to pass legislation to bring about compulsory enlistment of the medical profession in Australia for service in the Australian Imperial Force, including service abroad?" It will be remembered that in February last the Federal Committee determined that the facts should be presented to the Prime Minister, and requested Mr. Syme, who was in the chair at the meeting, to undertake this task. In due course he presented the following facts to the Acting Prime Minister, the Honourable W. A. Watt. The question quoted above was referred to the members of the British Medical Association at the time in Australia. The total number of members on the rolls of the six Branches on the first day of January, 1916, was 2,587. Of these, a large number were serving overseas. In April, 1917, Surgeon-General Fetherston recorded that no less than 994 medical men had gone abroad on active service since the beginning of the war. Assuming that at the time when the referendum was being taken there were 587 abroad, the percentage of those replying to the question would have been 68. That is, in round figures, about two-thirds of those who received a voting paper, replied to it. The actual return was 52.6% of the total number of members on the lists. Of those replying, 74.28% recorded an affirmative vote. It is therefore not surprising that the Minister expressed astonishment that so many men and so large a proportion of the profession should have voted in favour of compulsory conscription as applied to themselves. He promised to bring the figures before Cabinet, but, at the same time, he held

out no hope that the desire of the majority of the members would be given effect to. The vote was not unanimous, and the policy of the Government was opposed to compelling unwilling men to go to the front, unless the principle of universal conscription was accepted by the people.

On two occasions the people have been allowed to determine whether they preferred to perform the duty of citizens to their country or to live in comfort and safety, while others undertook their obligations. Parents do not, as a rule, ask their children whether they will carry out ordinary filial duties. Like children, the people of Australia refused to accept their duties willingly. The medical profession, as a body of men in a position of special trust, and with special obligations, found that the question affected them in a different way. They regarded it as a special privilege to serve the Empire and to give service to the soldiers who were fighting the greatest menace the world has ever known—a mighty people trained under the iron rule of militarism. The great majority were prepared to make any sacrifice; they asked to be allowed, as a whole profession, to place themselves unreservedly in the hands of the Empire. This loyal request has been refused.

In seeking for other means of attaining the cherished ends, we meet with stone walls. While we are being held back, the spirit of intense loyalty and readiness to subject all personal desires of fame, monetary profit and individual gain forces itself upon us from our colleagues across the seas. At the annual meeting of the great American Medical Association, held at Chicago from June 10 to 14, 1918, there was a wonderful medical military meeting, at which Sir James Mackenzie and Sir William Arbuthnot Lane represented the old country, Colonel Herbert A. Bruce represented the profession of Canada, M. Justin Godart and Major Edouard Rist represented the medical departments of the French Army and Captain René Sand represented Belgium. Surgeon-General Gorgas, the head of the Medical Corps of the United States, called the attention of his large and enthusiastic audience to the fact that a year ago there were about 700 medical officers in the Army; in June of this year they had nearly 20,000 commissioned medical officers. They had appealed to the great organizations of the medical profession, and the response had been prompt and loyal.



He recognized the sacrifices which the men earning from £10,000 to £20,000 were making in accepting the pay of a captain, but he had a still greater respect for the man who volunteered with the knowledge that his income of from £400 to £600 a year had left nothing over for a rainy day, and when he came back he would have to commence all over again. Surgeon-General Gorgas knew that if 20,000 did not suffice for America's needs, a still large number of men would fall in. No one can doubt that he spoke with authority.

Colonel Bruce, in a speech full of fascinating charm and direct appeal to the best side of human nature, told of a story, from which we may learn a lesson. He said:—

I recall the incident when Great Britain sent her expedition to Ashantee, and when a colonel of the Scotch Guard was addressing his men, he said to them: "I will not command any one to go on this expedition; there will be suffering; there will be misery; there will be hardships; there may be death. Let every man who will volunteer to follow me, take one pace to the front." So saying, he turned his head so as to give the men time to think and to act. Looking around, a flash of indignation went over his face as he saw the line was as solid as it had been before. He turned to his men and said with a touch of scorn: "My God! the Scotch Guards, and not a single volunteer!" A sergeant, touched to the quick at the rebuke, rushed toward the Colonel and said: "Sir, that whole line stepped forward." Ladies and gentlemen, what a great thing it would be for the nations of which we are citizens, for the homes that we represent, for the principles for which we fight—yea, for the institutions which we uphold, if we could all catch that vision, and, looking into the face of the generations yet to be, say to them: This has been a bloody business, but the whole line of civilization has stepped forward.

Three-quarters of the line took the step forward in Australia when the Federal Committee sent its message to the medical profession. Perchance, some of those who stood irresolute, hated the compulsion that lay behind the movement. Now compulsion has been dropped. We need the whole medical profession to come forward voluntarily. Is there one man who refuses to serve his country and his King?

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#### PREVENTIVE MEDICINE.

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The students of the Medical School of the University of Adelaide are fortunate in having listened to the excellent and timely address by Dr. F. S. Hone. The day is long gone by when entrance to the medical profession meant nothing more than a means for the individual to earn a living by endeavouring to treat diseases or patients. Time was when the knowledge imparted to the student scarcely extended beyond the

science of recognizing diseases and applying remedies which might do good, and which, as a rule, did but little harm. The practitioner gained little by little an experience of men and their ailments, and the more skilled acquired a knack of influencing their patients and thus performing valuable individual service. In rare instances a disease was cured. At a later date the accurate recognition of pathological states became more general, and the medical practitioner found that his equipment must include an intimate knowledge of the aetiology, pathology, clinical manifestations and nature of ordinary diseases. He was forced to admit that the most important task that he had to perform was to form as correct a mental picture of the altered physiology of the affected organs as the investigations undertaken up to the time permitted, and he had no cause to be satisfied unless his diagnosis included the recognition of altered function and chemical activity. As medicine developed more and more into an exact science, or rather aggregation of sciences, it was evident that successful treatment could only be applied when the exact nature of the pathological changes was understood and the causes giving rise to these changes appreciated. The old-time physician, with his empirical treatment and his alleged elegant prescriptions, had been left far behind. Some authorities went as far as to deny the utility of treatment altogether, save in the case of a few diseases for which specific remedies had been found. Since the means at our disposal for penetrating deeply into the minuter changes in the structure and function of organs and tissues are meagre, we have been compelled to realize that the medical profession has a still more important function to perform than the mere endeavour to check disease in the individual. The work of a great army of hygienists and pathologists has demonstrated that many serious and even incurable diseases are preventible. Disease, even of short duration, involves a serious loss to the community, since it restricts the earning capacity and increases the expenditure of the individual. It is therefore more economical, both for the individual and for the community, to prevent disease than to alleviate its effects or cure it. If it be admitted that the task of restoring to a patient normal physiological function is immensely difficult, and, in many, perhaps in the majority of, pathological conditions impossible with the means at present at our

disposal, it will not be denied that an organized effort on the part of the whole medical profession to prevent disease offers incomparably better prospects. The foundations of preventive medicine have already been laid, and the superstructure is now being built solidly and deliberately. Provided that the material used for this work is sound, there should be no doubt as to the value of enlisting the co-operation of every practitioner in this campaign.

Those who clamour for nationalization of the medical profession have too frequently confused the issues. There is nothing to gain by the enrolment of medical practitioners into a national service with the object of applying curative medicine. *Le jeu ne vaut pas la chandelle*. As long as disease is allowed to exist, the individuals of the community will claim the assistance of medical practitioners to treat them, and occasionally to cure them. Even when the millennium comes, and science teaches us how to prevent all disease, there will be careless and stupid people who will frustrate the endeavours of hygienists, and consequently there will always be some curative work left for the individual practitioner. The reactionaries, who fear that the march of progress will destroy the time-honoured traditions of the medical profession, can find solace in this fact. In the meantime, the more progressive section of the profession will not be content to be left in the rear. They will demand to take their part in the lead, and will map out the road in the direction of less disease and lower mortalities. A complete re-organization of the public health services, based on a recognition of the ætiology and pathology of disease, and equipped with sufficient powers to carry out work of prevention in accordance with modern principles, is the first step in the advancement. The protagonists of nationalization will soon discover that the idea of depriving medical practitioners of their freedom to deal with patients is a sterile proposal, which can do no good and may create dissatisfaction. They will also discover that what is really essential is a reform of the existing public services. From the first step to the second is a large gap, and this must be bridged over with caution, lest the structure collapses under its own weight. The second step embraces the establishment of an outgrowth of the public health service, which receives its guidance from the public health authority, and, at the

same time, directs the activities of the rank and file of the medical profession in the great work of attacking disease at its source. The value of this branch of the service will be directly proportionate to the thoroughness of the primary organization. Based on a sound scheme, the task of securing the assistance of the general practitioner should be relatively easy. The considered opinion of the whole profession should be obtained in the construction of this part of the organization of a reformed public health service. The third and last step comprises the part which the general practitioner will take in the prevention of disease. In this he cannot work alone. There must be co-ordination on the one hand with the public health service and on the other with the great body of the profession. The wisest arrangements will be those which satisfy the demands of the public. General principles can be set up on which these arrangements can be based. These principles must aim at the improvement of the public health and at the safeguarding of the masses in regard to the spread of disease.

#### THE EXPRESSION OF THE EMOTIONS.

The expression of the different forms of human emotion is brought about by the exhibition of a psychopathic mental state characteristic of each form of emotion, by alterations in the circulation in part regional and in part systemic, by muscular movements of varying intensity, by increased or by diminished glandular activity and by other changes in the functions of the organisms. Accompanying these physiological phenomena is a variation in the sensibility of the nervous system, so that an altered neurological condition is a specific feature of the different emotions. The more highly developed the emotional state becomes, the more strongly will the physiological concomitants be manifested. When the emotions are little excited there will be less physiological testimony of the psychopathic condition. It has occurred to Professor A. D. Waller to seek for the early manifestations of "emotive" physiological changes by observations<sup>1</sup> of the galvanotropic response. He has sought to detect with the galvanometer electrical signs of the presence of emotion in the absence of the ordinary visible muscular, circulatory and glandular witnesses. For this purpose simultaneous records have been taken of the muscular movements and the galvanometric changes. By means of these records it has been possible to demonstrate the existence of a galvanotropic phenomenon quite independent of any electrical change produced by muscular movements. The records have been taken photographically and can demonstrate variations in the resistance of the skin of the hands or feet and the slightest muscular movement.

<sup>1</sup> *Proc. Roy Soc., London, Series B.*, Vol. XC., p. 214, June, 1918.

The subject of the experiment reclines comfortably in a chair reading an unexciting book. A stimulus, calculated to arouse emotion, is made and signalled upon the record. Such stimuli have been an unexpected loud sound, as that of a motor horn, an unexpected burn from a match, a disagreeable odour and a painful thought. The response to the stimulus is of considerable magnitude, the resistance of the skin varying in a few seconds from 12,000 to 8,000 ohms or more. This electrical effect may last for some minutes. Since these phenomena were readily obtained with the electrodes on the palmar surfaces of the hands, but not with the electrodes on the dorsal surfaces, it was considered that glandular secretion might account for the changed electrical resistance. It was, however, found that the administration of atropine in no way affected the intensity of the electrical response. It was also noticed that the application of a tight rubber band to the limb, which rendered it pulseless and pale, did not affect the electrical phenomenon. The response to an idea was the most intense that could be elicited. A Belgian lady to whom was made the suggestion, "*Pensez à la Belgique*," exhibited a much more powerful response than could be obtained with other stimuli. In other subjects the idea of an air raid or the suggestion that they would be burned with a match excited a greater change in resistance than the loud noise of a horn or the application of the hot end of a cigarette. The further extension of these observations will be awaited with interest.

#### AN ALLEGED PARASITE IN LEUKÆMIA.

Clinicians of experience are usually very guarded in attributing a specific action to any drug in the many form of leukæmia, because of the lability of the signs and symptoms, and because remissions are known to occur independently of treatment. The story which Itsuyoshi Inabi and Shin Ohashi have to tell concerning the value of arsphenamin in a single case of myelogenous leukæmia is therefore of little practical importance, save in so far as the appearance in the blood of certain microscopic elements are concerned.<sup>1</sup> They were called upon to give medical attendance to a boy, aged five years and nine months, who had suffered from acute nephritis two years before and pertussis, diphtheria and morbilli nine months before. Ten days before admission to the hospital the child was taken ill with a swelling of the neck and a sore throat. These symptoms were accompanied by fever. On examination, it was found that the tonsils and pharyngeal mucous membrane were congested and reddened. The cervical lymphatic glands were enlarged; the edge of the liver was palpable below the costal margin, but the spleen was not obviously enlarged. After a few days albumin appeared in the urine and a little later there was some hæmaturia. The glands in the axillæ, at the elbows and in the groins became swollen and attained the size of lentils. The blood picture was typical of a disturbance of the myeloblastic functions. The total leucocytic count

was 84,600. Lymphocytes accounted for 18%, polymorphonuclear cells for 44%, myeloblasts, pro-myelocytes, myelocytes and meta-myelocytes 25%, mast cells 0.3% and polynuclear eosinophile cells 0.7%. The total cell count became reduced during the following eleven days to 49,500, and half the myeloblasts and all the mast cells disappeared from the blood picture. Otherwise, the differential count was not materially altered. At this date the first injection of arsphenamin was given. The second injection was given ten days later and the third eighteen days after the second. At the time of the third injection there were 19,000 leucocytes per cubic millimetre, and the differential count revealed 45% lymphocytes, 38% polymorphonuclear cells, 10% myeloblasts and myelocytes, and 1% polynuclear eosinophile cells. Incidentally, the red blood corpuscles diminished from 4,000,000 to 2,546,000. In the course of the four weeks following the first injection, while the enlargement of the lymphatic glands disappeared, a tumour was noted at the upper margin of the orbital cavity, arising from the frontal bone. The acute symptoms subsided and the child left the hospital much improved in general health. The child appears to have had attacks of fever at times after his discharge from the hospital. The frontal tumour enlarged progressively, and he died five months after the onset of the affection. The authors do not make out a good case in favour of any curative action of arsphenamin. After the first injection, however, they noted some peculiar bodies in the fresh blood preparations. All attempts to stain these bodies failed. The bodies were oval in shape, and measured about 3 microns in length and 1.5 to 2 microns in breadth. They contained two glistening nucleus-like masses of round contour, while the cytoplasm was homogeneous and greyish-white in colour. They were apparently not endowed with motility. The authors endeavour to argue from these facts concerning the significance of these bodies. They claim, and apparently with some justification, that the new bodies are unlike any hitherto described parasite. The fact that they were seen only in fresh films and not in stained preparations renders it unlikely that they were artefacts. There is one curious circumstance. The bodies were not discovered in the blood until the first dose of arsphenamin was given. This drug is a salvarsan substitute, and, according to many observers, an indifferent one. Whatever its therapeutic properties may be, its arsenic content suffices to exert a definite action on certain pathological parasites. It is therefore quite possible that the arsenic-containing drug caused the migration of the parasites from the medulla of the bones or from the other hæmopoietic organs into the peripheral blood. This single observation does not justify the acceptance of the author's suggestions that these microscopic bodies have an ætiological significance in leukæmia. It does, however, justify clinicians in searching for similar bodies in the blood of other patients suffering from leukæmia in one or other form. Care should be taken to exclude their presence before an arseno-benzol drug is given, and a minute examination should be made at short intervals after the application of the drug. If the find is confirmed, it may lead to an important advance in our knowledge of the pathology of these uncanny diseases.

<sup>1</sup> American Journal of Diseases of Children, July, 1918.



## THE REPAIR OF CRANIAL DEFECTS.

The loss of substance of the cranium as a result of war wounds has provided surgeons with frequent opportunity to apply divers means of filling in the defect. It is well recognized that, apart from the actual risk of leaving a considerable area of brain uncovered by bone, many patients suffer acutely from the fear of injury in this situation, and become morbidly depressed as a result of this fear. Artificial plates have proved disappointing, while the older procedure of replacing bone divided into small pieces is scarcely applicable under the conditions of war surgery, because the periosteum is frequently destroyed at the time of the injury. Charles Villandre, who has had an extensive experience in the surgical side of one of the neurological centres in France, has recorded his results in a series of 106 cases of cranial defect dealt with by surgical means.<sup>1</sup> In some of his cases the repair was undertaken to cover a defect resulting from a previous trephining; in others there was a need to replace an unstable spar by healthy tissue, while in a third class of case the surgical intervention was directed toward the relief of persistent headache and other disturbing symptoms. Notwithstanding the fact that in many cases fragments of infected bone or foreign bodies needed removal, he claims to have obtained good results in nearly every case. The best results apparently were obtained by the application of osteo-periosteal grafts from the tibia. This method has been worked out by Seydel, Borehardt and others. A rectangular piece of periosteum, with a thin layer of bone attached throughout, is cut from the surface of the tibia and planted into the freshened cranial defect. The graft is applied as a bridge spanning the defect, and the ends of the graft are thinned in such a manner that they glide over the pericranium and come to rest in contact with the *dura mater* or with the fibrous tissue replacing the *dura mater* at the site of defect. It is suggested that the periosteum continues to live and to carry out its osteogenetic functions. The author has no practical experience to determine whether the defect ultimately becomes filled in with new bone. It would seem that the bridge of transplanted bone persisted throughout the period of observation. The results were less satisfactory when cartilaginous cranioplasty was employed. In certain cases it was found at a later date that the cartilaginous graft possessed a certain degree of mobility, and consequently the protection afforded was less reliable than that of the osteo-periosteal graft. The pieces of cartilage were derived from the subject himself. They were prepared by Morestin's method. A network of catgut was constructed bridging the defect in the periosteum and the pieces of cartilage were either laid on this bed or inserted between its meshes. The author fears the insertion of cartilage between the inner table of the cranium and the *dura mater*, lest pressure symptoms give rise to Jacksonian epilepsy. He states that in the majority of his cases the transplant solidifies well and offers ample protection to the brain. It has been stated by some authorities that transplanted cartilage undergoes ossification. The histological examination of a piece of cartilage removed a con-

siderable time after the repair revealed a certain degree of atrophy and some fibrous new formation. New blood vessels, however, were detected in the zone of the transplantation. The third method employed was that of the introduction of plates of sterilized bone. This method did not justify its adoption. In four cases there was a frank failure to secure protection for the brain, while the risk of the graft being cast off as a foreign body must act as a deterrent to its general adoption. A paste made of phosphate and carbonate of calcium in olive oil was employed in four cases. In two it failed altogether. It thus appears that Villandre found the employment of osteo-periosteal grafts, at times supplemented by cartilaginous transplants, the most serviceable means of covering defects in the cranium.

## Vital Statistics.

## INFECTIVE DISEASES.

The following information is contained in the Bulletins issued by the Quarantine Service in May and June, 1918.

## Variola.

During the period from March 17 to May 18, 1918, 576 cases of variola and 285 deaths were recorded in Manila in the Philippine Islands, in addition to 228 cases of varioloid, with 5 deaths. In Zamboanga there were 21 cases of variola, with 5 deaths. In the Dutch East Indies there were 78 cases and 17 deaths reported since the publication of the previous Bulletin. There were five cases in the Straits Settlements between March 18 and April 22, 1918. One fatal case was recorded in Hong Kong during the fortnight ending May 4, 1918. Three cases were notified in New York during the fortnight ending December 22, 1917.

## Plague.

The total number of cases of plague notified in India between February 17 and April 20, 1918, was 306,471. In the same period there were 238,306 deaths from this disease. There were 149 cases and 143 deaths during the period from February 12 to April 22, 1918, in Java. In the Straits Settlements the number of plague cases reported at Singapore was 53, with 35 deaths, and at Penang two cases. Ten cases occurred in Ceylon between March 10 and April 13, 1918. Two cases, one of which was fatal, were reported at the Port of London on May 19, 1918. The patients were on board the steamship *Hawmandel*, from Bombay. A Bill of Health issued from Hong Kong on May 20, 1918, contains reference to one fatal case.

## Cholera.

Since the last reports, information concerning 93 cases of cholera, with 23 deaths, has been received from the Dutch East Indies.

## Typhus Fever.

The incidence of typhus fever in the various countries between February 16 and April 12, 1918, is given by the United States Public Health Service as follows:—

Place.	Cases.	Deaths.
Union of South Africa .. .. .	4,350	907
Mexico .. .. .	274	11
Egypt .. .. .	247	67
Greece .. .. .	112	11
Java .. .. .	78	17
Great Britain .. .. .	22	3
Norway .. .. .	3	—
China .. .. .	2	1
Japan .. .. .	6	2
Switzerland .. .. .	2	1
Tunisia .. .. .	2	—

Typhus fever was epidemic in Portugal and present in Guatemala during this period. One case was recorded at Chelsea, Massachusetts, U.S.A., on February 27, 1918.

It is with great regret that we have to record the death of Dr. Thomas Wilson Corbin, which took place in Adelaide on August 19, 1918. An obituary notice will be published in an early issue of the *Journal*.

<sup>1</sup> *The Medical Press*, June 5, 1918.

## Abstracts from Current Medical Literature.

### DERMATOLOGY.

#### (59) Hereditary Angiomata (Telangiectases) with Epistaxis.

Norman Paul (*British Journ. Dermatology and Syphilis*, January-March, 1918) describes a case of hereditary angiomata with epistaxis, and states that it is the first to be reported from Australia. It is identical with those cases recorded by W. Osler under the title of "a family form of recurring epistaxis, associated with multiple telangiectases of the skin and mucous membranes," and by Parkes Weber, under the title of "multiple hereditary developmental angiomata of the skin and mucous membranes, associated with recurrent hæmorrhages." Although most of these cases show an hereditary tendency, in the present series a remarkable family history is presented. The patient, a female, *æt.* 32, was able to trace the condition back as far as the great-grandmother, and through the respective generations to the members of her own family. The family tree showed that males and females were affected without distinction, and in three cases deaths were attributed to anæmia. In her case, as in the others, frequent bleeding from the nose in childhood was the first indication of the disease. This recurrent epistaxis continued, and small angiomata appeared about adult life. Sites of predilection were the face, the conjunctival surfaces of the lids, and the mucous membranes of the nose, lips and mouth. Frequently there were noticeable a few scattered telangiectases on the fingers and beneath the nails, whilst the trunk was in some cases affected. The lesions varied from pinpoint to millet-seed in size. None of the patients exhibited any tendency to hæmophilia, and, although the patient had recurrent epistaxis, she did not appear anæmic, an opinion verified by the blood count, which was as follows: Red blood cells, 5,110,000; white blood cells, 12,200; polymorpho-nuclear cells, 50%; large lymphocytes, 16%; small lymphocytes, 31%; large mononuclear cells, 1%; eosinophile cells, 2%. No nucleated red cells were seen. The red cells were normal in size and shape, and there was no polychromatophilia. The patient did not manifest any mental dulness or deficiency, as is occasionally seen associated with certain nævoid growths. A lesion was removed from the upper lip for microscopical examination. In the superficial portion of the corium numerous dilated vessels and blood-distended cavities, with a flattening out of the papillæ, were recognized.

#### (60) Fatal Mycosis (Granuloma) Fungoides.

A case of *mycosis fungoides* in which death occurred within seven months from the onset of the malady is published by Parkes Weber (*British Journ. Dermatology and Syphilis*, January-March, 1918). The integument exhib-

ited a florid eruption of somewhat raised red or purplish discs, or plaques of various sizes, chiefly located on the trunk. There were also fungating growths and large crateriform ulcers. The temperature was of a septic type, ranging from about 39° C. in the evenings, with a morning remission, to 36.6° C., but as death approached the temperature became subnormal; in all probability due to exhaustion. The urine was free from albumin and sugar. The liver, spleen and lymphatic glands were not decidedly enlarged. A blood count a few weeks before death showed erythrocytes 3,300,000 and leucocytes 8,000, whilst an examination made two months previously showed the red cells to be 4,400,000 and the white cells 13,300. The Wassermann test, which was applied on two occasions, gave a weakly positive reaction, but the author states that it is highly probable that in *mycosis fungoides* the Wassermann reaction is sometimes positive without there being any genuine syphilitic taint. A specimen of cerebro-spinal fluid obtained at necropsy gave a negative Wassermann reaction, and potassium iodide seemed to exert rather an injurious than a beneficial effect. The post-mortem examination disclosed endocarditis of the mitral valve, enlargement of the spleen, with two infarctions, and a nutmeg appearance of the liver, suggesting the presence of a centro-acinous toxicæmic change. The lungs did not exhibit any signs of tuberculosis, but there was an enlarged tracheal lymphatic gland, which was observed on microscopical examination to contain typical giant cells of tuberculous type and patches of commencing caseation, and, although the gland was doubtless tubercular, yet no tubercle bacilli could be demonstrated. Sections from a non-ulcerating lesion showed a diffuse permeation of the corium, with proliferating connective tissue cells, together with a certain number of lymphocytes and plasma cells. The epithelium of many of the sweat cells was proliferating, the lumen in some cases being filled up by these proliferating cells, so as to simulate in transverse or partial section the appearance of large giant or syncytium-like cells.

#### (61) X-ray Localization of Foreign Bodies.

Robert Knox holds the opinion that there is a need for standardization both of the methods of localizing foreign bodies by means of Röntgen rays and of the apparatus employed (*Lancet*, January 19, 1918). While he claims that the methods of localizing in common use are admirably suited to the purpose of yielding accurate results, he admits that the surgeon is not infrequently unable to discover the foreign body in the operating theatre. The methods advocated are divided into two groups. (1.) The plate method can be used with the tube above the patient or with the tube below the patient. In the third place, a stereoscopic localization may be carried out with the tube either above or below the patient. The advantages of one of the plate methods being chosen as the standard method are that a permanent record is pro-

duced, the operator is not exposed to the action of the rays, and when the tube is below the patient, the screen method can be superadded, if necessary. He regards the stereoscopic method as the most useful. There is, however, small chance of this method becoming the standard, partly on account of the increased expense, and partly because the process takes longer to carry out. (4.) The screen method is elaborated. He deals in a general manner with the necessity of determining the relative position of the foreign body to surface marks and to anatomical fixed points. The radiologist should employ radiographic charts and tables, and should educate himself minutely in practical anatomy. He suggests that certain standard drawings which he has prepared, should be employed in the standard method of indicating the localization of the foreign body. In the next place, he advocates the combined working of the radiologist and the operating surgeon. Using the screen method necessitates extreme care to avoid all undue exposure of the surgeon's hands to X-rays and to shorten the time of exposure of the patient. For this purpose the tube box must be specially adapted to this form of work. The theatre must be capable of being rendered absolutely dark, and standard couches or tables must be employed. The expense involved would prohibit this method from being used in all hospitals, but he considers that it would suffice if the theatre and apparatus in a few selected hospitals were adapted to standard localization work. The surgeons and radiologists in these hospitals would work together so advantageously that all difficult cases would be referred to them.

#### (62) Differential Diagnosis of Bone Tumours.

H. Baetger (*Amer. Journ. Röntgenol.*, May, 1918) considers that four cardinal points must be considered in the radiographic diagnosis of bone tumours: (1) invasion, (2) bone formation, (3) origin, and (4), condition of cortex. If invasion or non-invasion can be established, it can be at once told whether the condition is malignant or benign. Bone production, if present, limits the possible number of tumours. It rules out some malignant growths and some benign ones. Periosteal sarcoma produces a radiating growth of bone, and such formation is outside the line of the bone proper. Osteo-sarcoma produces bone, but at the same time destroys the cortex at a very early period. Cortex destruction is late in periosteal sarcoma. Simple osteoma causes a cauliflower-like growth of bone. It is generally symmetrical, and shows no evidence of invasion. Osteochondroma is medullary, and causes a swelling of the bone, but no new bone formation. Ossifying hæmatoma causes new bone formation, but the bone is laid down parallel to the cortex. *Myositis ossificans* is easy to distinguish, as the deposition of new bone is not connected with the cortex. The origin of the tumour can frequently be made out. Certain tumours commence in the medulla, e.g., giant-cell sarcoma, certain in the bone itself, e.g.,

carcinoma, and certain in the periosteum, e.g., periosteal sarcoma. The condition of the cortex indicates at an early stage whether the growth is malignant or benign. Giant-cell sarcoma is benign in character, and destroys the cortex symmetrically. These points should be of great help in diagnosis, but, of course, do not apply to the cranial bones or scapula and do not help after surgical interference has taken place.

#### (63) Skin Ink.

The following formula is recommended by Finzi for skin-marking before operation. The stain is unaffected by iodine or any of the other usual skin antiseptics: pyrogalllic acid, 1 gm., acetone 10 c.cm., solution of the perchloride of iron 2 c.cm., and methylated spirits to 20 c.cm. The solution should be kept in a bottle, and applied with a camel's hair brush. The mark is at first brown, but later becomes a brilliant black (*Radiology and Electrotherap.*, July, 1917).

### BIOLOGICAL CHEMISTRY.

#### (64) Detection of Methylene Blue.

C. Gautier describes a simple method of detecting methylene blue in urine by means of spectroscopic examination (*C.R. Soc. Biol., Paris*, May 11, 1918). He finds that the colouring matters belonging to the groups of triphenylmethane and of quinone-imide yield absorption bands in solution. Methylene blue exhibits a dense absorption band in the red portion of the spectrum and a less dense band in the orange. The presence of traces of methylene blue in urine is readily detected by placing the urine in a tube, 30 cm. long and 12 mm. in diameter, closed at the ends in the same way as the tube of a saccharimeter. With the spectroscope the absorption bands can be seen on looking through the urine contained in the tube. In some cases the methylene blue must be formed from the chromogen before the spectroscopic examination. The author states that it is easy to make approximate estimations of the quantity of methylene blue present in the urine in comparative tests of the hourly elimination of the dye by means of the intensity of the bands.

#### (65) Tests for Renal Efficiency.

R. Flitz has made a series of observations by means of the urea index of McLean at a military hospital in France on the functions of the kidneys in patients suffering from nephritis (*Journ. Amer. Med. Association*, June 8, 1918). These observations have been most helpful for diagnostic and prognostic purposes. These studies were made in a tent hospital with elementary laboratory facilities. Each patient was given 150 c.cm. water to ensure a flow of urine. Thirty minutes later the bladder was emptied. The time at which the bladder was emptied was accurately noted. Thirty-six minutes later three cubic centimetres of blood were with-

drawn from a vein in the arm into a dry tube containing a little potassium oxalate. The bladder was again emptied exactly 72 minutes after urine had previously been voided. The urine obtained was accurately measured and used for analysis. The patient took neither food nor water during the experiment. The seventy-two minute period is arbitrarily chosen, since it is the twentieth part of one day. Determinations were made of the amount of the urea in the blood and in the urine by the urease method of Marshall. Estimations were also made of the quantities of preformed ammonia, albumin and sodium chloride in the urine. The weight of the individual was measured to one kilogram and the urea index was calculated with the aid of a ten-inch slide-rule or with logarithms. Histories of three patients are recorded. The first patient, a soldier, aged 24 years, was admitted suffering from shortness of breath on exertion and from great susceptibility to fatigue. He had been well all his life except for attacks of nephritis in 1915 and 1916. Examination of the patient showed that the heart was slightly enlarged, but revealed no evidences of peripheral arterio-sclerosis. The urine contained a trace of albumin, a few casts and a few leucocytes. Within two hours of the patient's admission the renal examination showed the amount of urea in the blood to be 3.7 gm. per litre and the urea index to be less than one. This examination showed that the patient was critically ill, and would probably die in a few days. The subsequent history showed the progress of the illness until the death of the patient on the seventh day. The percentage of urea in the blood increased to almost double, while the patient became oliguric during the last three days of life. The second patient was a soldier, aged 40 years, who had been well until seven days before entry into hospital. The illness commenced suddenly, with headaches and general malaise. The patient soon developed shortness of breath and general oedema. Physical examination showed the patient to be orthopneic, with marked oedema of the face, sacrum and legs. There was no hydrothorax or ascites. The patient remained in the hospital one month. For the first fifteen days there was oliguria. The amount of urea in the blood varied around 1.3 gm. per litre, while the urea index stayed below 10. After fifteen days the amount of urea in the blood fell to normal, while the urea index rose to 170. The patient was evacuated from hospital while still oedemic. Two months later the oedema had disappeared. The third patient was a soldier, aged 34, who had been ill for more than a year. On admission, the patient showed brawny oedema of the face, legs and entire body. A recent hæmorrhage could be seen in the retina. In hospital the urea index rose steadily from 10 to 70. The amount of urea in the blood fell to 0.5 gm. per litre. After some weeks diuresis occurred, accompanied by an increased excretion of sodium chloride and disappearance of the oedema. A favourable prognosis was given in this case on the steadily rising

urea index, though for some weeks there was no other improvement in the condition of the patient.

#### (66) Lactose in Milk.

O. Folin and W. Denis (*Journ. Biol. Chemistry*, March, 1918) have estimated the lactose in human and cow's milk by two separate methods. They have employed the copper phosphate solution of Folin and McEllroy and estimated the reducing power in the milk, either whole or diluted. They have found that there is no need to remove fat or protein for these estimations. Good agreement has been observed between the results obtained with the untreated milk and determinations of the lactose upon the filtrates freed from the proteins of milk by similar titration, by the polariscope and by the colourimetric method. Five cubic centimetres of the solution of copper sulphate of 60 gm. to the litre correspond to 4.04 gm. lactose. The results of these estimations upon 200 samples of milk have been compared with the figures obtained by a colourimetric measurement of the lactose. This method involves the comparison of the colour developed by boiling milk with picric acid and sodium carbonate with the colour formed by a standard solution of lactose under the same conditions. The proteins are removed by precipitation with picric acid and the milk much diluted before developing the brown colour. The titration and colourimetric figures showed a good agreement.

#### (67) Reducing Bodies in Cerebro-spinal Fluid.

P. Gérard (*C.R. Soc. Biol., Paris*, March 9, 1918) points out that an increased amount of protein in the cerebro-spinal fluid is often accompanied by a diminished quantity of glucose during meningitis. In two patients recently examined by the author, the proteins amounted to 6 gm. per litre cerebro-spinal fluid. The rapid estimation of the quantity of reducing substances without preliminary defecation, as performed by Sicard and others, does not yield results even approximately accurate under these circumstances. Thus, 2 c.cm. of a solution containing 4 gm. proteins and 0.5 gm. glucose per litre, yield no precipitated oxide of copper when boiled with 0.3 c.cm. Fehling's solution. The author describes a simple method of removing the protein. Five cubic centimetres of cerebro-spinal fluid are placed in a test-tube with a mark at the level indicating a content of 10 c.cm. The fluid is acidulated and 200 mg. sodium sulphate are added. The mixture is diluted to 10 c.cm. and placed in a boiling-water bath for 10 minutes. A small funnel is put in the mouth of the test-tube to lessen loss by evaporation. After coagulation is complete, the contents of the test-tube are cooled and the volume adjusted to 10 c.cm. The coagulated proteins are removed by filtration. The filtrate can be used for any of the rapid methods for estimating the quantity of the reducing substances. The whole procedure does not occupy more than 20 minutes.



## British Medical Association News.

### MEDICO-POLITICAL.

#### Meeting of the Federal Committee.

A meeting of the Federal Committee of the British Medical Association in Australia was held on August 7 and 8, 1918, in the Library of the New South Wales Branch, 30-34 Elizabeth Street, Sydney.

Dr. W. T. Hayward, C.M.G., took the chair.

Mr. G. A. Syme moved, on behalf of the Committee, to welcome Dr. Hayward on his return, and congratulated him on the many honours that had been conferred upon him. He referred in well-chosen words to the high esteem in which Dr. Hayward was held by the medical profession throughout Australia, and to the value which the Federal Committee placed on his services. The motion was carried by acclamation.

In acknowledging the welcome and congratulations of the Committee, Dr. Hayward pointed out that he had special reason to be proud of the signal honour bestowed on him when the Federal Committee re-elected him their Chairman during his absence. He had valued the honour of having been made a Vice-President of the Association and of having had the honorary degree of LL.D. bestowed upon him, but had recognized that these honours had come to him chiefly as representative of the medical profession in Australia. The bestowal of the Companionship of Saint Michael and Saint George by His Majesty the King was a personal recognition of his work as a soldier, and the compliment paid him by the Federal Committee in appointing him their Chairman *in absentia* was also a personal one.

The Honorary Secretary read a list of the names of the representatives of the six Branches in Australia forming the Federal Committee. In two instances deputy representatives had been appointed to attend the meeting. The Queensland Branch was represented by Dr. W. N. Robertson and Dr. J. Lockhart Gibson, the New South Wales Branch by Dr. G. H. Abbott and Dr. F. P. Sandes (Honorary Secretary), the Victorian Branch by Mr. G. A. Syme and Dr. J. F. Wilkinson (as deputy for Dr. R. H. J. Fetherston), the South Australian Branch by Dr. W. T. Hayward (Chairman) and Dr. F. S. Hone, the Tasmanian Branch by Dr. Gregory Sprott and Dr. D. H. E. Lines (as deputy for Dr. C. L. Park). The Western Australian Branch was not directly represented, but Dr. F. S. Hone was authorized to act as proxy for Dr. R. C. Everitt Atkinson, and Dr. W. Trethowan sent an apology for his inability to attend the meeting.

Mr. G. A. Syme reported that, in accordance with the instructions given him by the Committee at its last meeting, he wrote to the Prime Minister during the month of April, 1918, setting out the facts concerning the taking of a plebiscite on the question of compulsory enrolment of medical practitioners for service in the Australian Army Medical Corps, both at home and abroad, and asked for an interview. He received a reply to the effect that the Acting Prime Minister would be pleased to see him. The Honourable W. A. Watt was much impressed by the figures. He expressed surprise that any body of men should have recorded such a large vote in favour of voluntary conscription. He was, however, unable to overlook the fact that the vote was not unanimous, and that it did not attain the three-quarters majority suggested as a reasonable ground for the demand. He promised to bring it up before the Cabinet, but he could hold out no hope that it would be acted upon.

A vote of thanks was passed to Mr. Syme for the considerable trouble to which he had been put in carrying out the wishes of the Federal Committee.

#### Relationship of Overseas Branches to the Parent Association.

A communication from the Medical Secretary of the British Medical Association was considered, dealing with the means that could be adopted to strengthen the organization of the Association throughout the Empire. The object of the letter was to devise some means of extending the autonomy of the overseas Branches, and, at the same time, of preserving the bond of union with the parent Association. The Chairman reported that during his visit to England he had had the opportunity of taking part in the discussions of the Council of the Association on this subject. He had received great

courtesy from the Chairman and members of the Council. His remarks had been received with attention, and had been accepted as the opinion of the profession in Australia, which he represented. He stated that the Organization Committee had expressed a desire to fall in with the wishes of the overseas Branches. The matter was carefully considered, and the Honorary Secretary was instructed to send a reply to the Council in London.

#### Venereal Diseases.

The Honorary Secretary reported that, acting on the instruction of the Federal Committee, he had communicated with the Victorian and Tasmanian Branches with the object of obtaining modifications of the clauses dealing with venereal diseases of the *Health Acts* in those States, in accordance with the resolutions of the Federal Committee. The matter had been dealt with in Victoria, but up to the present time Parliament had not been asked by the Cabinet to consider these amendments.

#### Uniform Medical Registration in Australia.

The Honorary Secretary reminded the members that this matter had received their attention at several meetings during the past years. He had forwarded copies of the report of February 2, 1914, of the Sub-Committee on Uniform Medical Registration for Australia to the several Branches, and had received replies from all. The Queensland Branch notified that it approved of the main principles set out in the report. The New South Wales Branch re-affirmed the opinion, as set out in a memorandum of the Council dated April 13, 1915. The Council of the Branch was opposed to any endeavour being made at the present juncture to induce the New South Wales Government to surrender to the Commonwealth Government its legislative rights in connexion with medical registration. The Victorian Branch was also opposed to the transference of medical registration from the care of the State Parliaments to that of the Federal Government, on the ground that this transference might possibly lead to the lowering of the standard of efficiency of the medical profession. The South Australian Branch submitted certain suggestions for the amendment of the principles, as set out in the report of the Sub-Committee. The Branch was opposed to any endeavour to obtain a Commonwealth Medical Act. The Western Australian Branch recorded its opposition to any alteration of *The Medical Act, 1894*, of Western Australia. The Tasmanian Branch approved of the principles contained in the report of the Sub-Committee.

The Chairman pointed out that, from the replies received, it would appear that no Branch advocated the adoption of means to induce the State Governments to surrender their legislative rights to the Commonwealth Government, and therefore the Committee should pass on to the consideration of the principles contained in the Sub-Committee's report.

The report was discussed, clause by clause, and a number of amendments were agreed to. In the end the report, as amended, was adopted.

#### National Medical Service.

The Honorary Secretary reported that the several Branches had been communicated with, in accordance with the resolution of the Federal Committee of February last. In the absence of concrete suggestions from the Branches, it was determined to defer the consideration of the subject.

#### War Emergency Organization.

The Honorary Secretary reported that the Branches had replied to the "Memorandum on the Obligations of the Medical Profession to its Members who are on Military Duty," submitted to them by the Federal Committee. The Queensland Branch had endorsed the provisions and had appointed an Arbitration Committee and the Western Australian Branch had taken similar action. The Victorian Branch had intimated that they approved of the appointment of an Arbitration Committee, but differed from the Federal Committee in regard to the apportionment of fees. The New South Wales Branch had expressed itself in accord with the spirit of the memorandum, but was not prepared to adopt the proposals. This Branch held that each case should be dealt with on its merits, and preferred to leave the consideration of disputes to a standing committee of the Council. The South Australian Branch had signified their approval of the memorandum, subject to certain amendments. They proposed to substitute a committee for the suggested Arbitration Com-

mittee and to deal with the disputes as they arose. The Tasmanian Branch was in accord with the proposals of the Federal Committee. The replies were received.

The Honorary Secretary next read the replies that had been received to the resolution passed by the Federal Committee on February 7, 1918, to the following effect:—

That the Federal Committee request the Branches to prepare for presentation at its next meeting a scheme for raising a Federal fund, to be administered by the Committee for the purpose of affording assistance to the dependants of those members of the medical profession who have been disabled or killed while on active service, and to the disabled members themselves.

The Queensland Branch had made the counter proposal that the Federal Committee should consider the establishment of a benevolent fund for all members of the British Medical Association in Australia. The New South Wales Branch had arrived at the decision that the duty of assisting and maintaining medical men who were permanently disabled and of providing for their dependants, was a national rather than a professional one, and should be undertaken by the Repatriation Committee. This Branch was further of the opinion that cases of immediate distress could best be dealt with by the profession in each State having its own benevolent fund. The Victorian Branch had suggested that a sub-committee be appointed to make arrangements for a levy of members, graduated according to the income of each practitioner, for the purpose of raising a Federal fund to be administered by the sub-committee. They expressed the opinion that all members should be called upon to contribute their just proportion of the sum required. The South Australian Branch recommended that a Federal fund be established out of donations, that the fund be vested in trustees (one in each State), that the funds be directed toward the assistance of the disabled and the dependants of those who had died, and also be used for loans on interest to men who, on account of the war, required temporary assistance. There should be a committee of management in each State. The Western Australian Branch and the Tasmanian Branch expressed their willingness to adopt any scheme which had the approval of the Federal Committee and of the other Branches.

Dr. W. T. Hayward emphasized the necessity of united action. The resolution of the Federal Committee had reference to a fund to be administered by the Federal Committee. He pointed out that the six States had not suffered equally in this regard. Some had been hit very hard, while others had escaped almost lightly. The South Australian Branch felt that, while they had been fortunate in having lost proportionately few of their members, they would wish to bear their due share.

In the course of an animated discussion it was pointed out that the assistance which the Repatriation Department was prepared to give, would keep from starvation the widows of the men who died. The members of the profession would wish to save the wives of their dead colleagues from the hardship of unaccustomed poverty. Some speakers referred to the difficulty that would be met in attempting to raise a levy, while others pointed out that it would be impracticable to ask for a definite proportion of a practitioner's income. At length there appeared to be general agreement that the subscriptions to the fund must be a voluntary response to an appeal. In reference to a scheme outlined in *The Medical Journal of Australia* of February 9, 1918, page 119, the opinion was expressed that the members would not subscribe on an average as much as £15 a year for three years, which would be required to raise a sum sufficient for the estimated needs. The Committee apparently felt that the expression of opinion from the New South Wales Branch might render the efforts of the Committee nugatory. The Chairman asked the New South Wales delegates whether, in the event of the adoption of a proposal for the establishment of a Federal fund, the New South Wales Branch would fall into line with the other Branches. The New South Wales delegates assured the Chairman that every effort would be made to induce the members of their Branch to do so. Several members put forward concrete proposals. The South Australian proposals were ultimately considered and adopted in the following form:—

- (i.) That a Federal Fund be established by donations from members of the profession in all the States.

- (ii.) That it be vested in trustees appointed by the Federal Committee.

- (iii.) That a local committee of management be appointed by the Branch Council in each State, to consist of three members of the British Medical Association.

- (iv.) That the fund shall be used in assisting medical officers who have been disabled and the dependants of those who have died.

- (v.) That the fund shall also be used to issue loans, with or without interest, to medical men who, on account of war service, may require temporary financial assistance.

- (vi.) That to create the fund an effort be made in each State to secure at once as large initial individual donations as possible or annual contributions.

On the motion of Dr. J. F. Wilkinson it was resolved:—

That three trustees be appointed to start the scheme as soon as possible, in the event of all the Branches approving of the scheme.

Steps having been taken to secure nomination of trustees, it was resolved to leave the approval of the appointments to the Chairman of the Committee.

#### Decline of the Birth-Rate in Australia.

The Honorary Secretary submitted a report embodying the proposals received from the representatives of the Branches for the counteraction of the decline in the birth-rate in Australia. The report was considered clause by clause, and, after discussion, it was adopted as amended, and a resolution was carried that it be published in *The Medical Journal of Australia*. The amended report is as follows:—

The Federal Committee recommend the adoption of the following measures for the purpose of counteracting the decline in the birth-rate in Australia:—

#### A. Venereal Diseases.

##### (i.) Duty of medical practitioners.

- (a) To educate the public as to the effect of venereal diseases in producing sterility and miscarriage.

- (b) To warn patients of their legal responsibilities, and of the danger of transmission of infection, if marriage be contemplated.

- (c) To give information to the other party or the sanitary authority, if intention to marry be persisted in, where this step is protected by legislation.

- (d) Either to adopt modern methods of treatment or refer cases to specialists.

#### B. Miscarriage.

##### (i.) Duty of Medical Attendant.

- (a) Not only to treat but also to endeavour to ascertain the cause of the miscarriage, with a view to the prevention of recurrence.

- (b) Not to terminate pregnancy except after consultation and with the support of the consultant.

#### C. Maternity and Child Welfare.

- (i.) That State maternity clinics be established in each centre for those who cannot afford private attendance.

- (ii.) That patients be admitted to hospitals prior to their confinement when treatment is required.

#### D. Obstetric Nurses.

- (i.) To secure better training and registration for midwives.

#### Free Medical Attendance in Federal Territory by Salaried Whole-Time Medical Officers.

The New South Wales Branch brought under the notice of the Federal Committee the fact that complaints had been received from practitioners residing in the vicinity of the Federal Territory concerning the conditions of medical practice in the Federal Territory by salaried medical officers of the Federal Government. It appeared that medical practice in the Federal territory had become a nationalized service, and that the medical officer attended everyone, whether in receipt of a small wage or of a large salary, free of charge to the patients. It was felt that the future employment of large numbers of persons in the capital and elsewhere in the Federal Territory would open the door to considerable abuse and that some action should be taken.

It was reported that the Queensland Branch had arrived at the conclusion that persons not employed by the Commonwealth Government should not be attended free of charge by the medical officer. The Victorian Branch disapproved altogether of free medical attendance. The South Australian Branch considered that persons not in destitute circumstances should be required to contribute toward the cost of their medical attendance. The Western Australian and Tasmanian Branches disapproved of free medical attendance.

After some discussion it was moved by Dr. W. N. Robertson, seconded by Dr. Gregory Sprott, and resolved:—

That where a Federal medical officer is paid by salary for ordinary medical attendance, his salary should be equivalent to not less than 6d. per employee per week, with a minimum of £500 per annum.

#### The Treatment of Disabled Soldiers.

Dr. W. T. Hayward asked the Committee to consider, as a matter of urgency, the question of the treatment of returned invalided soldiers and the arrangements which should be made between the medical profession and the Repatriation Committees. He referred to the men after discharge from the Army. The Honorary Secretary read a letter which had been received dealing with a similar subject. A medical practitioner had been asked by the Repatriation Committee to examine and report on the widow of a deceased soldier, and, in the communication from the Repatriation Department, it was stated that the Department assumed that the medical man would be prepared to carry out this work gratuitously. If he required payment for his professional services, the Department would be prepared to pay a fee. It was felt that this method of approaching a medical man was objectionable, and should not be adopted. Dr. Hayward read a report which had been drawn up by a sub-committee of the South Australian Branch on the subject. The report would be considered by his Branch Council.

It was resolved that the scheme embodied in the report be submitted to the Branches for consideration and report, and that the Branches be asked to consider the whole question of the treatment of disabled sailors and soldiers after discharge from the services.

#### Chairman's Annual Address.

On the motion that the question of instituting an annual address by the Chairman be considered at the next meeting of the Committee, Dr. Hayward asked whether it had been suggested that the retiring Chairman or the Chairman elected at the meeting should deliver the address. He was quite prepared, if the Committee desired it, to deliver an address on the expiration of his term of office. It appeared to him, however, that the reading of an address would take up much of the time of the Committee, which could ill be spared. Possibly the publication of an address might be a more practical suggestion. After a short discussion it was resolved to postpone the consideration of the matter.

Votes of cordial thanks were carried to the Chairman, to the New South Wales Branch for providing accommodation for the Committee and to the President and Council of the New South Wales Branch for their hospitality to the members of the Committee. A vote of thanks was also accorded to Dr. R. H. Todd for the assistance he had rendered to the Committee, both in the preparation for the meeting and at the meeting itself.

Wilmot Fenwick, M.B., 1915 (Univ. Sydney), 33 Catherine Street, Leichhardt, has been nominated for membership of the New South Wales Branch.

### THE PUBLIC HEALTH ADMINISTRATION OF NEW SOUTH WALES.

(Continued from page 147.)

#### Infective Diseases (Continued).

##### Variola.

During the course of the year 1916 107 cases of mild small-pox were notified or detected within the State. In some cases the patients and their friends failed to report the occurrence of the disease to the health authority, and prosecutions were undertaken. In four instances heavy penalties were imposed. Since July, 1913, 2,279 cases of variola have been

notified. Dr. W. G. Armstrong, the Senior Medical Officer of Health for New South Wales, gives a short account of the outbreak in a separate report. He points out that during the first four months of the year cases continued to occur in the Newcastle area. The number of patients admitted to the Isolation Hospital at Stockton steadily declined, and the last patient was discharged on May 18, 1916. Cases also arose at Narrabri and Walgett, in the north-west part of the State. The type of disease was mild, and no deaths occurred. Dr. Armstrong raises the question whether the efforts of the health authority to stamp out the disease should continue unabated, in view of the fact that after four years the mild character was maintained unaltered. He gives the chief arguments which would justify a continuation of the efforts of the health authority to stamp out the disease. Variola, even in a mild form, is very disfiguring. The disease tends to produce abortion when it attacks pregnant women. The eruption is a very loathsome one. The attack is accompanied by considerable pain and discomfort. In the last place, the health authorities in the adjoining States are apprehensive of invasion from New South Wales, and would strongly resent any slackening of the precautions to limit the spread of the infection in the State.

#### Other Infective Diseases.

No mention is made in the report of any infective diseases other than those which are notifiable in the State. In the year 1917 there were registered in New South Wales 515 deaths from diarrhoea and enteritis, 142 deaths from pertussis, 116 from puerperal fever, 59 from septicæmia and pyæmia, 30 from erysipelas, 26 from morbilli and two from beri beri. All these diseases are preventible, and the duty devolves on the public health authority to apply such measures of prevention as have proved to be of value and as are adapted to local circumstances. The attention of hygienists has been directed during the past few years to the appalling fatality of cardio-vascular diseases. In 1917 no less than 1,920 persons died from these conditions, while a further 548 died from Bright's disease, 26 from alcoholism and five from chronic lead poisoning. The magnitude of the task which the public health authorities will have to face sooner or later, is well illustrated by these figures. In 1917, of the 7,518 persons who died, approximately 2,500 died, directly or indirectly, from lesions of the cardio-vascular system. In other words, those diseases are responsible for one-third of all deaths.

#### State Hospitals.

##### Hospital Admission Dépôt.

Part of the duties of the first Government Medical Officer of Sydney, Dr. A. A. Palmer, with the assistance of the second Government Medical Officer, Dr. A. C. Cahill, is to deal with indigent sick persons seeking admission to the various hospitals and institutions at the Hospital Admission Dépôt. During the year 1916 no less than 12,084 persons presented themselves. This number is 1,068 less than the number of applicants dealt with in 1915. Over 7,000 of these persons were born in New South Wales, while over 3,900 had been resident in the State for upwards of five years. Approximately 22.8% of these people were over 60 years of age; the third, fourth, fifth and sixth decades were almost equally represented, while 2,683 patients were under 20 years of age. There were 990 children under five years of age. Of the 12,084 persons, 3,426 were sent to the Coast Hospital, 436 to the Royal Prince Alfred Hospital, 267 to the Sydney Hospital, 172 to the Women's Hospital, 117 to the Hospice for the Dying and 6,277 to one of the State Hospitals and Asylums.

##### The Coast Hospital.

During the year 1916, 4,618 patients were admitted to the Coast Hospital. There were 424 patients in the Hospital at the beginning of the year, and 431 were still under treatment at the end of the year. The number of persons discharged was 4,440, while 171 persons died. The death-rate, calculated in the usual manner, works out at 3.92%. The Acting Medical Superintendent gives a death-rate per cent. of total discharges of 3.7. This figure should be 3.9. The average number of patients in the Hospital at one time was 447, as compared with 440 in the preceding year. The average duration of stay was 32.29 days, as compared with 30.9 in 1915. According to the Acting Medical Superintendent, the cost of maintenance average £77 4s. 11d. per patient. We presume that the average is calculated on the average num-



ber of patients in residence; £36,857 7s. 4d. divided by 447 yields £82 9s. 1d.

The number of patients admitted with enteric fever was 79, as compared with 104 in 1915. The case mortality was 10.1%. There were 960 patients suffering from scarlet fever, of whom 22, or 2.2%, died. No less than 1,149 persons were admitted on account of diphtheria. The total number of notifications in the metropolis was 2,829. The Acting Medical Superintendent gives the amount of antitoxin administered to the patients, the number of weeks the patients were in the Hospital, the ages of the patients and the number admitted each fortnight throughout the year. This information would be more valuable if the figures were co-ordinated with a classification according to the day of disease on which the patients were admitted. The majority of the patients received six, eight or ten thousand units of antitoxin. The maximum amount given to one patient was 152,000 units. Intubation was performed on nine patients and tracheotomy on three. Of the 1,149 patients, 32 died. This is equivalent to a case mortality of 2.8%. Six of the deaths took place six weeks or more after admission, while 16 took place within the first week of admission. The type of morbilli dealt with was apparently very mild. There were 208 patients and one death, which yields a case mortality in round figures of 0.5% (not 0.004%, as printed in the report). Of the 41 cases of pertussis, nine were fatal. The case mortality was therefore 22%. There were 48 cases of erysipelas, 230 of parotitis and 22 of variola.

A special table is published, giving the number of cases of the various pathological conditions treated, the number of persons cured, relieved, unrelieved and dead, and the number still under treatment at the end of the year. This information is of value for reference purposes. In a further table the list of operations performed is given.

A considerable amount of diagnosis work was undertaken in the laboratory attached to the Hospital. It is interesting to note that in 7,365 cases no growth of diphtheria bacilli took place as a result of the first inoculation. A second smear was made in these cases, and in 1,097 the bacilli were grown.

Four Assistant Medical Officers, as well as the Medical Superintendent, were absent on leave with the Australian Imperial Force. The Acting Medical Superintendent, Dr. D. Wallace conducted the Hospital throughout the year while three relieving Medical Officers replaced the absent Assistant Medical Officer. Of the nurses three left to take up military duties and 12 left to take up private nursing. During the course of the year there were 122 cases of illness among the nurses. No less than 12 of the nurses suffered from enteric fever. One nurse died of pneumonia.

(To be continued.)

#### FRIENDLY SOCIETIES IN VICTORIA.

The Premier of Victoria has made the proposal that the counsel engaged by the Victorian Branch of the British Medical Association and by the Friendly Societies' Association to appear before the Royal Commissioner, His Honour Judge Wasley, should confer together. If this proposal is carried into effect, the discussions will be held in private and counsel from both sides will be supported by two or three members of the two bodies.

### Correspondence.

#### INFECTION AND DISINFECTION.

Sir,—At a time like the present, when the whole world is suffering from severe de-population, the question arises whether we are doing our best to conserve what we have left; the next question is how can it be "bettered." The answer, to my mind, is efficient organization for the prevention and spread of disease. This will become a more severe problem to be properly met after the return of "our boys from the front" at the termination of the war, as one knows that, besides the wounded, there are many returning with tubercular trouble and other diseases. Therefore, again the question arises more strongly of efficient prevention.

At the present, any notifiable disease is reported to the health authorities, wherever they may be, the medical officer

of health duly visits the infected premises and gives his directions for the disinfection of the same, but there is nothing done to check or see to the efficient carrying out of the same. Any medical officer of health, if asked, would tell you candidly that he could not say whether they are or not. He and the public are quite at the mercy of the recipient of his instructions; they may not have the ability to understand or carry out what he has ordered, or they may have no intention to try, not realizing the stern necessity for the conservation of health and lives by so doing. In places like Hongkong, Japan, etc., all disinfection of houses for infectious diseases are carried out by the local authorities and their sanitary staff themselves; they do not trust the people themselves to do it. Also, at our own seaports, where ships from the east and other places arrive, the port authorities send this staff to disinfect the holds and cargoes; the crew do not attempt it. I claim very strongly that the same provision should also be made by each local health authority to deal with all the notifiable diseases arising in their respective locality. The question of expense for the smaller country towns and boroughs would arise, but by combining offices, as nuisance inspector, dog tax collector, dairy inspector, pound keeper and such like and making a certain small charge per room to be disinfected, to cover cost of materials and the time of the man or men employed on the job, it would make any extra cost very light on those municipalities outside of the big centres. By this means, I hold, a very great advance in the prevention of disease would be made, and so lower the present death-rate, and the public would be saved from being at the mercy of either the ignorant or careless person.

Yours, etc.,

A. NORRIS WILKINSON, M.R.C.S. Eng., L.R.C.P. Lon.  
Medical Officer of Health, Borough of Inglewood.

Inglewood, Victoria,  
August 11, 1918.

### Obituary.

#### CHARLES THOMAS HOLMES.

On June 12, 1918, Charles Thomas Holmes, the Medical Superintendent of the Mackay District Hospital, died of tetanus, after an illness of three days' duration.

Charles Thomas Holmes was born in 1877 in the old country. He studied medicine at the University of Durham and in 1900 graduated as Bachelor of Medicine and Bachelor of Surgery with first-class honours. During his student career he acted as Assistant Ship Surgeon on one of His Majesty's cruisers, and visited many British and foreign ports, including Constantinople and Shanghai. After qualification, he received an appointment as Resident House Surgeon at the Teignmouth Hospital, where he had the privilege of working under Rutherford Morison and other well-known surgeons. From Teignmouth he went to Dublin, where he held a house appointment at the National Maternity Hospital. He gained a considerable experience at this time in obstetrics and gynaecology. In 1902 he travelled to South Africa and was appointed Resident Surgeon to the Port Elizabeth Hospital. At a later date he filled the position of local Medical Officer of Health. In 1908 he left South Africa and came to Queensland. At first he practised in Innisfail, then at Gayndah, and finally at Mackay. In May, 1915, he was appointed Medical Superintendent at the Mackay District Hospital.

He was a man of engaging manners, kind and attentive to his patients, with whom he was uniformly popular. He leaves a widow, three little children and a large circle of friends to mourn their loss.

### Books Received.

- AIDS TO THE ANALYSIS OF FOOD AND DRUGS, by C. G. Moor, F.I.C., and William Partridge, F.I.C.; Fourth Edition; 1918. London: Baillière, Tindall & Cox; Foolsap 8vo., pp. 268. Price, 4s. 6d. net.
- A TREATISE ON MATERIA MEDICA AND THERAPEUTICS, INCLUDING PHARMACY, DISPENSING PHARMACOLOGY AND ADMINISTRATION OF DRUGS, by the late Bakhaldas Ghosh; Edited by B. H. Deane and Birendra Nath Ghosh, F.R.F.P.S.; Seventh Edition; 1918. Calcutta: Hilton & Co.; Crown 8vo., pp. 698. Price, 7s. 6d. net.
- SURGICAL THERAPEUTICS AND OPERATIVE TECHNIQUE, by E. Doyen; English Edition, prepared by the Author in collaboration with H. Spencer-Browne, M.B., etc.; 1918. London: Baillière, Tindall & Cox; Volume II.; Large Royal 8vo., pp. 682, with 982 illustrations. Price, 25s. net.

THE MEDICAL ANNUAL, A YEAR BOOK OF TREATMENT AND PRACTITIONER'S INDEX; 1918, Thirty-sixth Year. Bristol: John Wright & Sons, Limited; London: Simpkin, Marshall, Hamilton, Kent & Co., Ltd.; Demy 8vo., pp. 722. Price, 10s. net.

THE MUD LARVAE, by Crobble Garstin; 1918. Sydney: Angus & Robertson, Ltd.; Published by arrangement with Messrs. Methuen & Co., Ltd., London, for sale in Australia and New Zealand; Crown 8vo., pp. 89. Price, 1s. net.

LA GANGRENE GAZEUSE, Bacteriologie, Reproduction Experimentale, Sérothérapie, par. M. Weinberg et P. Séguin. Monographies de L'Institut Pasteur, avec 45 figures, 8 planches en noir et 8 planches en couleurs; 1918. Paris: Masson & Cie; Royal 8vo., pp. 444. Price, 20 fr.

## Proceedings of the Australian Medical Boards.

### VICTORIA.

The undermentioned has been registered under the provisions of Part I. of the *Medical Act, 1915*, as a duly qualified medical practitioner:—

Frank Neil Rodda, Women's Hospital, Carlton, M.B. et Ch.M., Sydney, 1916.

Additional qualification:—

Alexander Park, M.D., Queen's University, Belfast, 1917.

Names of deceased practitioners removed from the Register:—

Douglas Dunbar Jamieson.

Edward John McCardel.

## Medical Appointments.

Dr. Archibald Macdonald (B.M.A.) has been appointed Public Vaccinator for the South-Eastern District, Victoria. It is announced that Dr. W. S. Holmes (B.M.A.) has been appointed Government Medical Officer at Teralba, New South Wales.

Under the provisions of the *Health Acts, 1900 to 1917*, Dr. J. P. Wilson (B.M.A.) has been appointed Assistant Bacteriologist and Pathologist, Department of Public Health, Queensland.

During the absence of Dr. Ernest Humphrey (B.M.A.), Dr. H. Evans (B.M.A.) has been appointed Health Officer and Acting Medical Officer to the State Children Department, Townsville.

Dr. Charles De Wolfe Heard has resigned his position as Third Assistant Medical Superintendent, Hospital for the Insane, Queensland.

## Medical Appointments.

### IMPORTANT NOTICE

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
<b>VICTORIA.</b> (Hon. Sec., Medical Society Hall, East Melbourne.)	All Friendly Society Lodges, Institutes, Medical Dispensaries and other contract practice. Australian Prudential Association Proprietary, Limited. National Provident Association. Mutual National Provident Club.
<b>QUEENSLAND.</b> (Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Brisbane United Friendly Society Institute. Townsville Friendly Societies' Medical Union. Cloncurry Hospital.

Branch.	APPOINTMENTS.
<b>SOUTH AUSTRALIA.</b> (Hon. Sec., 3 North Terrace, Adelaide.)	Contract Practice Appointments in South Australia. Contract Practice, Appointments at Renmark.
<b>WESTERN AUSTRALIA.</b> (Hon. Sec., Health Department, Perth.)	All Contract Practice Appointments in Western Australia.
<b>NEW SOUTH WALES.</b> (Hon. Sec., 20-24 Elizabeth Street, Sydney.)	Australian Natives' Association. Balmain United F.S. Dispensary. Canterbury United F.S. Dispensary. Leichhardt and Petersham Dispensary. M.U. Oddfellows' Med. Inst., Elizabeth Street, Sydney. Marrickville United F.S. Dispensary. N.S.W. Ambulance and Transport Brigade. North Sydney United F.S. People's Prudential Benefit Society. Phoenix Mutual Provident Society. F.S. Lodges at Casino. F.S. Lodges at Lithgow. F.S. Lodges at Parramatta, Auburn and Lidcombe. Newcastle Collieries — Killingworth, Seaham Nos. 1 and 2, West Wallsend.
<b>TASMANIA.</b> (Hon. Sec., Macquarie Street, Hobart.)	Medical Officers in all State-aided Hospitals in Tasmania.
<b>NEW ZEALAND: WELLINGTON DIVISION.</b> (Hon. Sec., Wellington.)	Friendly Society Lodges, Wellington, N.Z.

## Diary for the Month.

- Aug. 27.—N.S.W. Branch, B.M.A., Medical Politics Committee; Organization and Science Committee.  
 Aug. 28.—Vic. Branch, B.M.A., Council.  
 Aug. 29.—S. Aust. Branch, B.M.A.  
 Aug. 30.—N.S.W. Branch, B.M.A.  
 Sept. 4.—Vic. Branch, B.M.A.  
 Sept. 6.—Q. Branch, B.M.A.  
 Sept. 10.—Tas. Branch, B.M.A., Council and Branch.  
 Sept. 10.—N.S.W. Branch, B.M.A., Ethics Committee.  
 Sept. 11.—W. Aust. Branch, B.M.A.  
 Sept. 12.—Vic. Branch, B.M.A., Council.  
 Sept. 12.—Last Day for Nomination of Candidates representing N.S.W. Branch for election on the Federal Committee.  
 Sept. 13.—S. Aust. Branch, B.M.A., Council.  
 Sept. 13.—N.S.W. Branch, B.M.A., Clinical.  
 Sept. 17.—N.S.W. Branch, B.M.A., Executive and Finance Committee.  
 Sept. 18.—S. Sydney Medical Association (N.S.W.).  
 Sept. 20.—Q. Branch, B.M.A., Council.  
 Sept. 24.—N.S.W. Branch, B.M.A., Medical Politics Committee; Organization and Science Committee.

### EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.  
 Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.  
 All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 20-24 Elizabeth Street, Sydney, New South Wales.